8-8-2017

Experiences of racism and race-based traumatic stress: The moderating effects of cyberracism, racial/ethnic identity, and forgiveness

Terrence A. Jordan II
Georgia State University

ACCEPTANCE

This dissertation, EXPERIENCES OF RACISM AND RACE-BASED TRAUMATIC STRESS, by TERRENCE A. JORDAN II, was prepared under the direction of the candidate's Dissertation Advisory Committee. It is accepted by the committee members in partial fulfillment of the requirements for the degree, Doctor of Philosophy, in the College of Education and Human Development, Georgia State University.

The Dissertation Advisory Committee and the student's Department Chairperson, as representatives of the faculty, certify that this dissertation has met all standards of excellence and scholarship as determined by the faculty.

_____
Don Davis, Ph.D.
Committee Chair

_____
Cirleen DeBlaere, Ph.D.
Committee Member

_____
Jane Brack, Ph.D.
Committee Member

_____
Melissa Zeligman, Ph.D.
Committee Member

_____
Date

_____
Brian Dew, Ph.D.
Chairperson, Department of Counseling and Psychological Services

_____
Paul A. Alberto, Ph.D.
Dean
College of Education and Human Development

AUTHOR'S STATEMENT

By presenting this dissertation as a partial fulfillment of the requirements for the advanced degree from Georgia State University, I agree that the library of Georgia State University shall make it available for inspection and circulation in accordance with its regulations governing materials of this type. I agree that permission to quote, to copy from, or to publish this dissertation may be granted by the professor under whose direction it was written, by the College of Education and Human Development's Director of Graduate Studies, or by me. Such quoting, copying, or publishing must be solely for scholarly purposes and will not involve potential financial gain. It is understood that any copying from or publication of this dissertation which involves potential financial gain will not be allowed without my written permission.

_____

Terrence A. Jordan II

NOTICE TO BORROWERS

All dissertations deposited in the Georgia State University library must be used in accordance with the stipulations prescribed by the author in the preceding statement. The author of this dissertation is:

Terrence A. Jordan II
Department of Counseling and Psychological Services
College of Education and Human Development
Georgia State University

The director of this dissertation is:

Don Davis, Ph.D.
Department of Counseling and Psychological Services
College of Education and Human Development
Georgia State University
Atlanta, GA 30303

CURRICULUM VITAE

TERRENCE A. JORDAN II, M.S., M.A.
2323 Piedmont Road NE • #3316 • Atlanta, GA 30324
(414) 975-6965 • terrence.jordan@gmail.com

EDUCATION

Doctor of Philosophy in Counseling Psychology, Georgia State University Expected 08/2017
Department of Counseling and Psychological Services (APA Accredited)
Dissertation: Experiences of Racism and Race Based Traumatic Stress

Master of Arts in Counseling Psychology, University of Minnesota 05/2012
Department of Educational Psychology
Master's Thesis-Plan B: White Racial Identity Attitudes and Multicultural Competency

Master of Science in Sport Psychology, Georgia Southern University 05/2010
Department of Health and Kinesiology
Master's Thesis: The Impact of Racial Microaggressions on Black Athletes: Implications for Counseling and Sport Psychology

Bachelor of Science in Kinesiology, University of Minnesota 05/2008
School of Kinesiology
Minors: African-American Studies; Coaching

RESEARCH EXPERIENCE

Georgia State University, Dept. of Counseling and Psychological Services 08/2012-Present
Position: Graduate Research Assistant

University of Minnesota, School of Public Health 03/2011-05/2012
Position: Graduate Research Assistant

University of Minnesota, College of Education & Human Development 07/2011-08/2011
Position: Graduate Research Assistant

MANUSCRIPTS SUBMITTED, IN PRESS, OR PUBLISHED

Jordan, T.A., II., Davis, D., DeBlaere, C., McElroy, S., Westbrook, C., Yang, X., Choe, E., O'Bryant, B., Hook, J., & Placares, V. (2016). Racial or gender microaggressions in the classroom. Manuscript submitted for publication.

Davis, D., DeBlaere, C., Brubaker, K., Owen, J., **Jordan, T.A., II.**, Hook, J., & Van Tongeren, D. (in press). Microaggressions and perceptions of cultural humility in counseling. *Journal of Counseling & Development*

DeBlaere, C., **Jordan, T.A., II.**, & Zelaya, D.G. (2014). Racial Microaggressions. *ACA Practice Briefs*.

Owen, J., **Jordan, T.A., II.**, Turner, D., Davis, D., Hook, J., & Leach, M. (2014). Therapists' multicultural orientation: Client perceptions of cultural humility, spiritual/religious commitment, and therapy outcomes. *Journal of Psychology and Theology, 42,* 91-98.

SELECTED PROFESSIONAL PRESENTATIONS

Davis, D. E., **Jordan, T.**, Joshua N. Hook, Owen, J., Everett L. Worthington. Racial forgiveness (2014). Paper presented at the Society for Counseling Psychology Conference, Atlanta, GA, Atlanta, GA.

Jordan, T.A., II. & Thomas, M. A. (2014). Lived experiences of minoritized graduate students: Supervisory and ethical issues. Roundtable discussion at Division 17 Counseling Psychology Conference, Atlanta, GA.

Jordan, T.A., II. (2012)**.** Be at the top of your game: Principles of relaxation and stress management from sport psychology. Outreach presentation given at Georgia Tech University, Atlanta, GA.

McElroy, S. E., **Jordan, T. A., II.**, & Thomas, M. A., & Davis, D. E. (2013). Relational spirituality: Spiritual appraisals of intergroup forgiveness. Poster presented at the 2013 American Psychological Association Convention, Honolulu, HI.

Ojelade, I.I., **Jordan, T. A., II.**, & Williams, M. (2014). African centered trauma assessment: A closer look at African centered approaches for assessing trauma. Presentation given at the 5th Annual National Conference on African/Black Psychology, Florida A&M University, Tallahassee, FL.

Thomas, M. A., **Jordan, T. A., II.**, McElroy, S.E., Hook, J. N., Davis, D. E. (2014). Microaggressions at the intersection of race and religion. Paper presented at the 2014 American Psychological Association Convention, Washington, D.C.

Thomas, M. A., **Jordan, T. A., II.**, McElroy, S. E., & Davis, D. E. (2013). Relational humility in the context of psychotherapy. Poster presented at the 2013 American Psychological Association Convention, Honolulu, HI.

CLINICAL EXPERIENCE

Atlanta VA Medical Center, **APA Accredited**, Atlanta, GA 08/2016-08/2017
Position: Psychology Intern

Atlanta VA Medical Center, Trauma Recovery Program, Atlanta, GA 06/2015-06/2016
Position: Advanced Doctoral Psychology Practicum Clinician

A Healing Paradigm, LLC., College Park, GA 06/2013-06/2016
Position: Doctoral Practicum Clinician

The Grady Trauma Project, Emory University/Grady Hospital, Atlanta, GA 09/2014-05/2015
Position: Advanced Doctoral Practicum Clinician

Kennesaw State University, Kennesaw, GA 08/2013-05/2014
Position: Doctoral Practicum Clinician

Georgia Institute of Technology, Atlanta, GA 08/2012-05/2013
Position: Doctoral Practicum Clinician

Neighborhood Involvement Program, Minneapolis, MN 09/2011-06/2012
Position: Practicum Therapist (Master's Level)

PROFESSIONAL MEMBERSHIPS

American Psychological Association, Graduate Student Affiliate 01/2013-Present

EXPERIENCES OF RACISM AND RACE-BASED TRAUMATIC STRESS: THE MODERATING EFFECTS OF CYBER RACISM, RACIAL/ETHNIC IDENTITY, AND FORGIVENESS

by

TERRENCE A. JORDAN II, M.S., M.A.

Under the Direction of Don E. Davis, Ph.D.

ABSTRACT

Race is a source of trauma that may result in a wide range of mental and physical health consequences (Pieterse, Todd, Neville, & Carter, 2012). In Chapter 1, I conduct a systematic review of research on race-based traumatic stress. Although studies have documented the link between perceived discrimination and race-based traumatic stress, there is a need to explore factors that can amplify or buffer this relationship. Thus, in Chapter 2, I examine three theorized moderators of the relationship between racial discrimination and race-based traumatic stress: cyber-racism, racial/ethnic identity, and trait forgivingness. Data was collected from a sample of 397 African American community-based participants using Mechanical Turk. Results from the study

revealed that perceptions of racism were significant and positively correlated to race-based traumatic stress symptoms ($r = .62$, $p < .01$). As predicted, cyberracism strengthened this relationship. Forgivingness buffered this relationship. Against my prediction, regardless of level of racial/ethnic identity, there was a similar association between perceived racial discrimination and race-based traumatic stress. I discuss implications for future research. I also discuss practical implications for practitioners, especially regarding habits of engaging social media during periods of intensified racial conflict on social media.

INDEX WORDS: racial discrimination, racism, trauma, racial identity, ethnic identity, stress, social media, cyberracism, forgiveness

EXPERIENCES OF RACISM AND RACE-BASED TRAUMATIC STRESS: THE MODERATING EFFECTS OF CYBER RACISM, RACIAL/ETHNIC IDENTITY, AND FORGIVENESS

by

TERRENCE A. JORDAN II, M.S., M.A.

A Dissertation

Presented in Partial Fulfillment of Requirements for the

Degree of

Doctor of Philosophy

in

Counseling Psychology

in

Department of Counseling and Psychological Services

in

the College of Education and Human Development

Georgia State University

Atlanta, GA

2017

ACKNOWLEDGMENTS

The process of earning a doctorate and writing a dissertation is arduous and it is certainly not done singlehandedly. I would like to give honor and praise to God for my family, friends, and colleagues. Thank you Terrence and Janice Jordan. I will continue to live in a way that reflect your life-long teachings. More especially, I am grateful to Aleah for putting up with an absentee partner during this process. Aleah has been unfailingly supportive as I spent time pouring energy into pursing goals that has taken me away from our relationship. It is to her credit that I have been able to keep my sanity.

I would like to express the deepest appreciation to my committee chair Dr. Don Davis, who has the attitude and the substance of a genius. He unexpectedly took me on as his advisee and in the process conveyed a spirit of adventure in regard to research and mentorship. Without his guidance and persistent help, this dissertation would not have been possible. I would certainly be remiss not to mention and sincerely thank my committee members Dr. Cirleen DeBlaere, Dr. Jane Brack, and Dr. Melissa Zeligman. Without your help, insight, expertise, encouragement, and emotional support, this research would not have happened.

I would also like to thank my friends, both near and far, who have supported me with prayers, laughter, and encouragement. Your support throughout this process will forever be remembered and valued. Thank you for your openness to providing guidance, answering questions, and calming my anxieties. I wish there were room on my diploma to write the names of my supporting cast.

TABLE OF CONTENTS

LIST OF TABLES

LIST OF FIGURES

1 A REVIEW OF EMPIRICAL STUDIES EXAMINING RACIAL DISCRIMINATION AS A SOURCE OF TRAUMA

"Struggle is the essence of life for us, yet the form of struggle makes a difference in the psychology of the individual. I have often wished that our struggle could somehow be less agonized, less emotionally complex."

~James Forman, 1972

The words of Forman (1972) capture some of the ways that racism affects the quality of life, mental health, and physical health of African Americans. Exposure to racial stress leads to negative emotional states, psychological distress, negative coping mechanisms (e.g., substance use, sleep problems), and functional changes in physiological systems (Williams & Mohammed, 2009). Racism traumatizes, hurts, humiliates, enrages, and prevents optimal growth and functioning of individuals and communities (Adams, 1990; Pierce, 1995). The multiple and persistent ways in which racism affects marginalized populations becomes traumatizing.

Although there are examples of resilience and strength, racism often leads to hopelessness, isolation, dysfunction, devastation, and exhaustion. Prominent examples of racism abound, include racial incidents on college campuses (e.g., University of Missouri President resigning, University of Oklahoma Sigma Alpha Epsilon singing racist chant); police brutality (e.g., Michael Brown, Sandra Bland, Eric Garner); political activities suggestive of anti-immigrant sentiments (e.g., comments by Donald Trump during primaries); domestic terrorism (e.g., Charleston church shooting), sports (e.g., Donald Sterling), and racial violence on the Internet. The prevalence and severity of recent events suggest that racism is very active at the societal, institutional, and personal level (Jones, 1997).

Racism affects everyone—victims, offenders, and innocents (i.e., young children) who become future victims and offenders. Researchers have sought to understand the nature of racism, prejudice, and discrimination in society and its influence on mental health. The breadth and complexity of racism has not been adequately examined, particularly research examining racism as a source of trauma. The purpose of the current chapter is to understand the traumatic effects that racism has on marginalized people. First, I reviewed key definitions in the literature. Second, I conducted a systematic search of empirical studies on trauma symptoms arising from experiences of racism. Third, I identified the existing gaps in this literature in order clarify important directions for programmatic research on trauma symptoms occurring because of experiences of racism.

Terms Defined and Conceptualized

Race is a social construction that permits the exploitation of one group over another with the development of ideology that justifies it (Dovidio, 2000). It involves myths about populations of people and how they are viewed as naturally or biologically different from other populations (Cokley, 2007). *Racism* is defined as "the beliefs, attitudes, institutional arrangements, and acts that tend to denigrate individuals or groups because of phenotypic characteristics or ethnic group affiliation" (Clark et al., 1999, p. 805). Racism can be overt, intentional, or unintentional (Sue, 2007).

Racial discrimination can be classified using a tripartite typology, including (a) individual, (b) institutional, and (c) cultural racism (Jones, 1997). *Individual racism* involves racial prejudice, personal stereotypes, and discrimination that creates and supports disparities between members of different groups. *Institutional racism* refers to the intentional or unintentional manipulation of policies that restrict the opportunities of particular groups of

people. For example, Wacquant (2002) outlined four bodies that have successively operated to define, confine, and control African Americans in the history of the United States: slavery (1619-1865), Jim Crow (1865-1965), the ghetto (North, 1915-1968), and the hyperghetto and prison (1968-present). Lastly, *cultural racism* involves beliefs about the superiority of one's cultural heritage over that of other races and the expression of this belief in individual actions or institutional policies.

Racial identity refers to "a sense of group or collective identity based on one's perception that he or she shares a common heritage with a particular racial group" (Helms, 1993, p. 3). Research on racial identity provides insight regarding how experiences of racism may differ based on racial identity (Cokley, 2007). It also helps explain individual differences among perceptions of racism.

Ethnicity refers to a characterization of a group of people who see themselves and are seen by others as having a common ancestry, shared history, shared traditions, and shared cultural traits such as language, believes values, music, dress, and food (Cokley, 2007). Ethnicity is being used interchangeably with race "when the definition of ethnicity includes biophysical traits" (p. 225). *Ethnic identity* refers to the subjective sense of ethnic group membership that involves self-labeling, sense of belonging, preference for the group, positive self-evaluation of the ethnic group, ethnic knowledge, and involvement in group activities (Cokley, 2007; Phinney, 1996).

Stress is defined as "a person–environment, biopsychosocial interaction, wherein environmental events (stressors) are appraised first as either positive or unwanted and negative" (Carter, 2007, p. 18). When an unwanted or negative stressor exceeds one's perceived ability to cope or adapt, one experiences stress reactions. *Trauma* is a form of stress and creates a

multitude of effects at the psychosocial, biological, spiritual, and political level. Events that evoke very high levels of stress traumatize almost everyone, but whether traumatization occurs for events at lower levels of stress depends on a variety of biopsychosocial factors (Lazarus, 1993). Although trauma is a form of stress, it is important to clarify the difference between the two constructs. Trauma is a subset of stressors that involve the following characteristics:

> …exposure to actual or threatened death, serious injury, or sexual violence and can take place in one or more of the following ways: (1) directly experiencing the traumatic event(s), (2) witnessing, in person, the event(s) as it occurred to others, (3) learning that the traumatic event(s) occurred to a close family member or close friend and in cases of actual/threatened death of a friend or family member the event(s) must have been violent or accidental, and (4) experiencing repeated or extreme exposure to aversive details of the traumatic event(s). (American Psychiatric Association, 2013, p. 271)

In some cases, traumatic events lead to the development of Posttraumatic Stress Disorder (PTSD). According to the most recent edition of the Diagnostic and Statistical Manual of Mental Disorders (DSM-5; American Psychiatric Association, 2013), PTSD involves the development of symptoms such as intrusions, avoidance, negative changes in mood and thinking, and hyperarousal after exposure to a traumatic event. Furthermore, these symptoms are often accompanied by other problems, such as depression, substance abuse, relationship problems, and physical symptoms (Sanders-Phillips et al., 2014).

For the purpose of the current review, I acknowledge that scholars disagree on how narrowly to circumscribe traumatic events, which has implications for the current topic. For example, the Diagnostic and Statistical Manual of Mental Disorders would narrowly define trauma as events that are perceived as life-threatening; whereas other scholars (e.g., Carlson,

1997)—especially those drawing on trauma theories to describe racism or other types of relational betrayals (e.g., infidelity in romantic relationships)—might include a broader range of existential or relational ruptures.

Carter (2007) proposed a nonpathological model of traumatic stress referred to as race-based traumatic stress and injury. Prior to Carter's (2013) measure of race-based traumatic stress, there were no other assessment tools available that documented the traumatic impact of particular encounters with racism. Although, researchers have found that racism is related to a range of physical and mental health effects, other elements are essential for the reactions to be considered traumatic. Carter's measure differs from other trauma measures in that the event is racial and the criteria does not draw directly from DSM criteria for PTSD.

He defines a racial trauma as an event that evokes emotional or physical pain (or the threat thereof) that results from racism in forms of racial harassment, racial discrimination, or discriminatory harassment. Racial encounters can be direct, subtle, or ambiguous. They can occur on an interpersonal level or be the effect of systematic acts. Carter has suggested that for a racial encounter to be traumatic, it must be experienced as sudden, out of one's control, and highly negative. Symptom clusters typically include intrusions, arousal, avoidance, anxiety, anger, depression, low self-esteem, shame, and guilt. Carter's measure is currently the only measure of race-based traumatic stress. Whereas there is utility in using instruments that measure the frequency and stress associated with racial discrimination, it is also important to connect encounters of racism with reactions.

Purpose of Present Review

Racism is a source of trauma that may result in a wide range of mental and physical health consequences (Pieterse, Todd, Neville, & Carter, 2012). Posttraumatic Stress Disorder is

one of the most commonly studied post-trauma psychiatric disorders. Although there is a preponderance of evidence linking racial discrimination to stress and mental health outcomes, there has been a recent theoretical advance introduced by Carter (2007) that conceptualized racism as trauma. The purpose of the review is to examine studies of racial discrimination and trauma related outcomes. Pieterse's (2012) meta-analytic review of perceived racism and mental health did not solely reflect the relationship between racial discrimination and PTSD, but did conclude that this relationship may be important given that racism has many features associated with trauma. Therefore, this review aimed to assess the evidence about trauma reactions following exposure to racism or racial discrimination.

Method

To locate relevant empirical articles, I used three strategies. First, I searched *PsycINFO* and *Google Scholar* on October 9, 2015, using the terms *[racial discrimination], [racism] [ethnic discrimination]*AND *[trauma]*. These queries yielded over 1,000 items, which were manually reviewed based on inclusion criteria. Second, I reviewed the references of included papers.

I used the following process to determine whether articles were eligible for inclusion in the current review. First, I reviewed the title and abstracts of articles and included studies that were published in a peer-reviewed journal and included a measure of racial discrimination and racial trauma (including any study that used Carter's Race-Based Traumatic Stress Symptom Scale; Carter et al., 2013). Second, I obtained the full-text article and confirmed that the article met inclusion criteria. The methods and results of 11 studies that met inclusion criteria are summarized in Table 1.

Results

Overview of Sampling

The studies in this review include both community adult (n = 4), college student (n = 4) and adolescent (n = 3) samples. Only one study used a longitudinal rather than a cross-sectional design (Cheng & Mallinckrodt, 2015). The samples typically focused on a range of racial/ethnic minorities. For example, three studies were exclusively Latinx participants and one study included a sample of only First Nation or Indian participants. There were other studies (n = 4) that included White participants in their study along with other racially diverse groups.

Overview of Measures

Trauma symptoms. Five measures of trauma were used to assess participants' reactions to racism. Trauma measures are typically used for the assessment of conditions such as PTSD and are generally based on those criteria. In general, these measures are symptom based and target trauma symptoms. Of the five measures, the most commonly used instrument was the Posttraumatic Stress Disorder-Civilian Version (PCL-C; Weathers, Litz, Herman, Huska, & Keane, 1993), followed by the PTSD Symptoms Scale-Self Report (PSS-SR; Foa, Riggs, Dancu, & Rothbaum, 1993), the Childhood Trauma Questionnaire (CTQ; Bernstein & Fink, 1998), the PTSD Checklist-Specific (PCL-S; Weathers, Huska, & Keane, 1991), and the Trauma Symptom Checklist–40 (TSC–40; Briere & Runtz, 1989; Elliot & Briere, 1992). One study identified symptoms of PTSD based on responses to 12 items from the Diagnostic and Statistical Manual for Mental Disorders' (DSM-4; American Psychiatric Association, 2000).

The Race-Based Traumatic Stress Symptom Scale (RBTSSS; Carter, 2007) was created in order to address several limitations with using PTSD-like measures to assess for racial trauma reactions. Two studies explicitly drew on Carter's (2007) conceptualization and measurement

strategy of assessing race-based traumatic stress (Carter et al., 2013; Carter & Sant-Barket, 2015). In terms of evidence of construct validity, the new measure correlated with depression, instruction, anger, hypervigilance, physical reactions, low self-esteem, and avoidance. The development of this measure contributes to understanding the emotional impact of racism and racial discrimination. Unlike other measures, the RBTSSS link's a person's specific memorable racial encounter to possible psychological and emotional reactions that may reflect harm. Carter and Sant-Barket (2015) utilized the sample in Carter et al. (2013) to further assess all parts of the RBTSSS. They were interested in the reaction questions (i.e., *After, Recent*) to one's memorable encounter of racism. The authors found that both the *After* (within one month of the event) and *Recent* (reactions now when thinking about event) scales were positively and significantly correlated with the seven symptom scales.

Racial discrimination. Racial discrimination was assessed with a variety of measures. In fact, none of the 11 studies used the same measure. Measures of racial discrimination typically assess general or community experiences of racism; others are oriented toward educational or work-place settings. Pieterse (2012) points out that in many racial discrimination and race-related stress research studies, racism is measured with a single item, or as many events occurring over a lifetime, or during the last year or three years (Utsey, 1999; Williams & Mohammed, 2009). This provides us with an understanding of the general effects of racism. In this review, most studies assessed lifetime experiences of racism (n = 4), recent (within one year) experiences of racism (n = 4), and one focused on a specific context such as education.

The following are some of the instruments that were found to be used in the studies that were selected for review: The *General Ethnic Discrimination (*GED*)* scale (Landrine, Klonoff, Corral, Fernandez, & Roesch, 2006); the *Experiences of Discrimination (*EOD*)* Scale (Krieger et

al. 2005); the *Discrimination Stress Scale* (Flores et al., 2008); the *Spencer Discrimination Scale (*SDS*;* Kang & Burton, 2014*)*; *Racial Climate Scale* (RCS; Reid & Radhakrishnan, 2003); the *Racial and Ethnic Microaggressions Scale* (REMS; Nadal, 2011); the Perceived Discrimination (PD) subscale of the Acculturative Stress Scale for International Students (ASSIS; Sandhu & Asrabadi, 1994); the Race-Related Events Scale (RES; Waelde et al., 2005).

Primary Findings

Overall, most studies (n = 10) included found that experiences of discrimination were associated with trauma related symptoms. Effect sizes ranged from small to moderate. For example, in a sample of 383 Chinese international students, Wei et al. (2012) found a moderate relationship (r = .46) between racial discrimination and symptoms of post-traumatic stress. Currie et al. (2013) found the smallest relationship (r = .22) in a community sample of 381 Aboriginals or Indians.

Three studies examined post-traumatic stress as a mediator between perceived racial discrimination and another mental health outcome (Currie et al., 2013; Flores, Tschann, & Dimas, 2010; Torres & Taknint, 2015). Currie et al. (2013) found that PTSD was not a significant mediator in the association between racial discrimination and problem gambling. In a sample of 113 Latinx adults, traumatic symptoms mediated the relationship between ethnic microaggressions and depression (Torres & Taknint, 2015).

Only two studies examined potential moderators of the relationship between perceived discrimination and symptoms of post-traumatic stress. Torres and Taknint (2015) found that both self-efficacy and racial identity buffered the relationship between racial discrimination and symptoms of post-traumatic stress. Another study failed to replicate racial/ethnic identity as a moderator. In fact, in a sample of 91 college students, they found that the relationship between

racial discrimination and traumatic symptoms was stronger at higher levels of racial/ethnic identity (Khaylis, Waelde, & Bruce, 2007).

Although not the focus of the review, racial discrimination and trauma symptoms were also correlated with other negative outcomes such as illegal behaviors, substance use, sexual activity, and involvement in physical fights (Kang & Burton, 2014; Flores, Tschann, & Dimas, 2010; Sanders-Phillips et al., 2014). These findings are also important because it provides evidence that racial discrimination is a serious problem that not only inflicts stress and trauma, but also has the potential to lead to other negative consequences.

Discussion

This review has documented a robust link between racial discrimination and trauma. Findings suggest that exposure to racism can result in trauma related symptoms and are consistent with growing empirical literature conceptualizing racism as trauma (Ford, 2008; Khaylis, Waelde, & Brice, 2007; Pieterse et al., 2010). The contribution of this review highlights the need for more research to be conducted. For example, only 11 studies were available for examination. Furthermore, research in this area should explore moderating effects as some studies have shown that certain factors can strengthen or weaken the relationship between perceived discrimination and trauma symptoms (see Carter et al., 2017, Mossakowski, 2003; Neblett, Rivas-Drake, & Umaña, 2012; Tynes et al., 2012).

In many racial discrimination and race-related stress research studies, racism was measured with a single item, or as many events occurring over a lifetime, or during the last year or three years (Utsey, 1999; Williams & Mohammed, 2009). This was also consistent with selection of measures in this review. The findings in this body of research are important in that they provides an understanding of the general effects of racism. However, Carter (2013) has

pointed out that when researchers link racism to trauma, it has typically been accomplished by following the definition of trauma as it related to PTSD (e.g., Bryant-Davis & Ocampo, 2005; Roberts, Gilman, Breslau, Breslau, & Koenen, 2011). This calls for Carter's measure to be utilized more in research.

Carter's (2007) conceptualization of race-based traumatic stress injury was based on the literature on the effects of racism and race-related stress, and the indirect evidence from the PTSD literature. Carter (2007) used Carlson's (1997) notion of traumatic stress and applied it to racial encounters. Furthermore, he argued that race-based traumatic stress was brought on by emotional pain from a memorable racial encounter and includes a cluster of emotional symptoms. There has been some support for the notion of race-based traumatic stress and more is needed.

The current review had several notable limitations. First, the inconsistency in measures precluded my ability to evaluate results using meta-analyses. As discussed above, 11 different measures of racial discrimination were used, some of which used very different ways of operationalizing the construct. Likewise, only two studies actually used a measure of race-based traumatic stress. Second, some of the samples in the included studies were severely limited in certain respects (e.g., small sample size). Third, with the exception of one study, all other studies used correlational, cross-sectional designs. Cross-sectional designs are susceptible to recall bias and do not help determine cause and effect relationships. Fourth, some studies did not clearly distinguish racial discrimination from other types of discrimination, even though these constructs are often related in samples experiencing multiple marginalization such as women of color.

Conclusion

Given the gaps in work on racism and traumatic stress, I call for an aggressive research agenda. A critical issue involves clearly broadening our conceptualization of trauma to include relational and existential ruptures. First, currently there is only one measure of race-related traumatic stress. This measure has many strengths, but other measures are also needed in order to advance a vibrant field of study. Second, the relationship between perceived racial discrimination and post-traumatic symptoms appears fairly robust, but no research has employed designs that allow for stronger causal influence. For example, studies of college students in their first year might examine how serious incidents of racism may affect a variety of appraisal and stress-related variables over time during the adjustment to college. Or experimental studies might examine how ongoing experiences or memories of racism can amplify post-traumatic symptoms. Third, research should continue to explore theory-derived moderators of the relationship between perceived racial discrimination and post-traumatic stress (Williams & Mohammed, 2009). Several constructs seem especially promising. For example, given the increased attention to racism in institutions related to law enforcement in the media, future work should explore how media exposure may lead to ongoing triggering of traumatic memories that can exacerbate post-traumatic symptoms. In addition, in order to set the stage for possible prevention strategies, researchers should also explore possible protective factors, such as spirituality or racial identity. Researchers might start with constructs that have served as protective factors of the relationship between racial discrimination and general mental health symptoms.

Table

Table 1
Studies Examining Racial Discrimination and Trauma Outcomes

Author	Purpose	Participants	Method	Findings
Cheng & Mallinckrodt (2015).	To examine the longitudinal effects of experiences of discrimination on problem alcohol use and PTSD symptoms in Hispanics/Latino college students.	*n*=203; Hispanic/Latino students; 120 women and 83 men	The General Ethnic Discrimination (CED) scale (Landrine, Klonoff, Corral, Fernandez, & Roesch, 2006), which has 18-items. The Posttraumatic Stress Disorder Checklist—Civilian (PCL-C) version (Weathers, Litz, Herman, Huska, & Keane, 1993) is a 17-item measure. The Alcohol Use Disorders Identification Test (AUDIT; Saunders, Aasland, Babor, de la Fuente, & Grant, 1993) consists of 10 items.	Experiences of discrimination were significantly and positively associated with subsequent alcohol problems and PTSD symptoms, but that alcohol problems were not significantly associated with later discrimination or PTSD symptoms.

Carter & Sant-Barket (2015).	The purpose of the article was to discuss how psychologists and mental health professionals can use the RBTSSS in assessing the presence of stress and traumatic stress reactions to racial discrimination and racism experiences. In study 1, the authors wanted to determine whether the "after" the event and "recent" reaction responses of the RBTSSS were positively and significantly related. In study 2, the authors wanting to determine if there were demographic group differences on the RBTSSS.	*n*=381; adults, of whom 278 (73%) were female, 102 (27%) were male, and one nonresponse; self-reported racial group memberships were Black (32.8%), White (23.6%), Hispanic (22.6%), Asian/Pacific Islander (14.2%), Biracial (6.3%), and Other (0.5%). Sample from Carter et al., 2013 study.	Race-Based Traumatic Stress Symptom Scale was used to assess the prevalence and severity of psychological and emotional distress to memorable encounters of racism and racial discrimination.	Results of Study 1 indicated that the seven After and seven Recent reaction scales of the RBTSSS were positively and significantly related across all seven functions. In study 2, no significant group differences were found for any of the demographic variables except age. In addition, the Change items of the RBTSSS provide important and valuable information pertaining to the individual's functioning that might be observed by others.
Carter et al. (2013).	The study reports on the initial development of the Race-Based Traumatic Stress Symptom Scale (RBTSSS), developed to assess symptoms associated with experiences of racism and racial discrimination.	*n*=381; adults, of whom 278 (73%) were female, 102 (27%) were male, and one nonresponse; self-reported racial group memberships were Black (32.8%), White (23.6%), Hispanic (22.6%), Asian/Pacific Islander (14.2%), Biracial (6.3%), and Other (0.5%).	Scale construction, item development, and exploratory factor analyses	The EFA supported the construct validity and psychometric properties of the Race-Based Traumatic Stress Symptom Scale (RBTSSS). The RBTSSS is comprised of seven scales, as well as a total scale score that captures the

				combination of the individual scales that assess reactions to a memorable racial incident that has lasting emotional impact.
Currie, Wild, Schopflocher, Laing, Veugelers, & Parlee (2013).	To examine associations between racial discrimination and problem gambling among urban Aboriginal adults, and the extent to which this link was mediated by post traumatic stress.	*n*=381; First Nations, Aboriginal, or Indian community sample; 212 female and 150 male	Problem gambling was assessed using the Problem Gambling Severity Index (PGSI); a nine-item subset of the full measure. The Experiences of Discrimination (EOD) Scale measured self-reported discrimination due to Aboriginal race across nine situations (Krieger et al. 2005). The PTSD Checklist-Civilian Version (PCL) was used to assess current PTSD symptoms (Weathers et al. 1991).	Racial discrimination was significantly and positively associated with PTSD symptomology and continuous problem gambling (PG). PTSD symptomology did not predict PG. PTSD was not a significant mediator of the association between racial discrimination and problem gambling.

Flores, Tschann, & Dimas (2010).	To examine posttraumatic stress symptoms as a potential mediator between perceived racial/ethnic discrimination and health risk behaviors.	*n*=110; Mexican American adolescents; 54% male and 46% female	Authors used the 14-item Discrimination Stress Scale (Flores et al., 2008). Posttraumatic stress symptoms was measured by using a modified version of the PTSD Symptoms Scale—Self-Report (PSS–SR; Foa, Riggs, Dancu, & Rothbaum, 1993). Alcohol use was measured by using a composite of four items from the Drinking Styles Questionnaire (Christiansen, Smith, Roehling, & Goldman, 1989). Marijuana use was measured with a single item. A 20-item involvement in fight scale was developed. A single item assessed for number of sexual partners.	Adolescents who perceived more racial/ethnic discrimination reported worse posttraumatic stress symptoms. Adolescents who experienced heightened posttraumatic stress symptoms reported more alcohol use, more other drug use, more involvement in fights, and more sexual partners. When posttraumatic stress was included as a mediator, perceived racial/ethnic discrimination was related to fights; adolescents who perceived more racial/ethnic discrimination were involved in more fights. Posttraumatic stress symptoms mediated the effects of perceived racial/ethnic discrimination on alcohol use, other drug use, and number of sexual partners.

Kang & Burton (2014).	To understand racial disproportionality in juvenile delinquency by examining the effects of racism and psychological consequences of trauma.	*n*=189; 54% AA, 20% White, 12% Hispanic/Latino, & 10% Other; youth and all males	The Spencer Discrimination Scale (SDS), which we used to assess perceived experiences of discrimination. The Self Reported Delinquency Survey (SRD) was used to assess delinquency (Elliot, Huizinga, & Ageton, 1985). This is a 32-question measure. The Childhood Trauma Questionnaire (CTQ; Bernstein & Fink, 1998). In addition, the Trauma Symptom Checklist–40 (TSC–40; Briere & Runtz, 1989; Elliot & Briere, 1992) was used to assess trauma symptoms.	Childhood trauma, trauma symptoms, and racial discrimination experiences all significantly contribute to juvenile delinquency, but participants who experienced greater racial discrimination had higher posttraumatic stress symptoms and elevated delinquency rates.

Pieterse & Carter (2010).	To examine the associations among perceptions of racial and/or ethnic discrimination, racial climate, and trauma-related symptoms in a sample of racially diverse college students.	*n*=289; college students; 170 students (55%) identified as White and/or European American, 47 identified (15%) as Black and/or African American, and 71 identified (23%) as Asian and/or Asian American. There were 114 male (39%) and 173 female (61%) students.	Stress was measured with the Perceived Stress Scale–10 (PSS; Cohen, Kamarck, & Mermelstein, 1983; Cohen & Williamson, 1988). Trauma symptoms were measured with the Posttraumatic Stress Disorder Checklist—Civilian Version (PCL-C; Weathers, Litz, Herman, Juska, & Keane, 1993). Discrimination was measured using the 22-item PEDQ (Contrada et al., 2001). Racial climate was measured using the 8-item Racial Climate Scale (RCS; Reid & Radhakrishnan, 2003).	Racial and/or ethnic discrimination was a significant and positive predictor of trauma-related symptoms for Black students. For Asian students, perceived discrimination and racial climate both had a significant, positive, bivariate association with trauma-related symptoms. However, the final step of the multiple regression analysis suggested that after controlling for general distress, racial climate and not perceived discrimination was a unique predictor of trauma-related symptoms.

Sanders-Phillips, Kliewer, Tirmazi, Nebbitt, Carter, & Key (2014).	To examine the relationship between perceived racial discrimination, psychological distress, alcohol, and marijuana use in African American high school students.	*n*=567; African American high school students (61% female) who were part of a larger study of drug use in African American youth.	Questions regarding alcohol and marijuana use were taken from the Centers for Disease Control (CDC) Youth Risk Behavior Survey. The CES-D 8-item version (Melchior, Huba, Brown, & Reback, 1993) was used to assess symptoms of depression during the past week. Symptoms of PTSD were identified based on responses to 12 items from the Diagnostic and Statistical Manual for Mental Disorders' (DSM-4; American Psychiatric Association, 2000). Perceived racial discrimination was measured using a composite score from two questions.	Racism was associated with higher levels of depressive and posttraumatic stress symptoms, but not with alcohol or marijuana use. Depressive symptoms were associated with more alcohol but not more marijuana use. Posttraumatic stress symptoms were associated with higher levels of both alcohol and marijuana use, albeit not strongly.
Torres & Taknint (2015).	The current study sought to examine the moderating and mediational pathways linking ethnic microaggressions to depressive symptoms among Latino adults.	*n*=113; Latino/a adults (42 male, 67 female, 4 who did not report gender)	Racism was measured using the Racial and Ethnic Microaggressions Scale (REMS; Nadal, 2011). Ethnic identity was measured using the Multigroup Ethnic Identity Measure- Revised	Moderated mediational analyses revealed statistically significant conditional indirect effects in which traumatic stress symptoms mediated the relationship between

			(MEIM-R; Phinney & Ong, 2007). The General Self Efficacy Scale (GSE; Schwarzer & Jerusalem, 1995) was also used in this study. Trauma was assessed using the 17-item PTSD Symptoms Scale-Self Report (PSS-SR; Foa, Riggs, Dancu, & Rothbaum, 1993).	ethnic microaggressions and depression while ethnic identity and self-efficacy functioned as moderators. The major findings suggested that the indirect effects were the most robust within low ethnic identity and low self-efficacy.
Wei, Wang, Heppner, & Du (2012).	To examine the relationship between perceived racial discrimination, posttraumatic stress symptoms, and social connectedness as a moderator.	*n*=383; Chinese international students from two public universities; 182 (48%) men, 192 (50%) women, and nine who did not report their sex; 61% were graduate students, 35% undergraduate students, and 4% others.	The Perceived Stress Scale-4-item (Cohen, Kamark, &Mermelstein, 1983); The Perceived Discrimination (PD) subscale of the Acculturative Stress Scale for International Students (Sandhu & Asrabadi, 1994); The Social Connectedness in the Ethnic Community Scale and Social Connectedness in Mainstream Society Scale (Yoon, 2006); The Posttraumatic Stress Disorder Checklist (PCL; Weathers, Litz, Huska, & Keane 1994).	Perceived racial discrimination positively predicted PTSD symptoms after controlling for perceived general stress. There was a significant moderation effect of Ethnic Social Connectedness, but there was no significant moderation effect of Mainstream Social Connectedness on the association between perceived racial discrimination and posttraumatic stress symptoms.
Khaylis, Waelde, & Bruce (2007).	The purpose of this study was to clarify whether ethnic identity moderates the	*n*=91; undergraduate students (11% Caucasian, 6.6% African American,	The Multigroup Ethnic Identity Measure (MEIM; Phinney, 1992) was used	Both ethnic identity and count of race-related stressors were positively

relationship between the race-related stress and PTSD symptoms.	18.7% Hispanic, 47.3% Asian, 5.5% Middle Eastern, and 8.8% Other) who reported experiences of race-related stress.	to measure the degree of identification with the subject's self-identified ethnic group. The Race-Related Events Scale (RES; Waelde et al., 2005). measure assessed perceived exposure to race-related stress. The PTSD Checklist-Specific (PCL-S; Weathers, Huska, & Keane, 1991) was used to assess the past-month severity of 17 PTSD symptoms.	correlated with PTSD symptoms across multiple ethnic groups. Race-related stress, but not ethnic identity predicted PTSD symptoms when exposure to the other variables were statistically taken into account. The significant interaction suggests that the relationship of race-related stress to PTSD symptoms is exacerbated for those with a stronger ethnic identity. The interaction between racism and ethnic identity explained a significant portion of variance of PTSD symptoms. In other words, in the face of increasing levels of race-related stress, participants with higher levels of ethnic identity experienced higher levels of PTSD symptoms.

References

Adams, P.L. (1990). Prejudice and exclusion as a social traumata. In J.D. Noshpitz & R.D. Coddington (Eds.), *Stressors and the adjustment disorders* (p. 362-391). New York: John Wiley.

Anderson, L. P. (1991). Acculturative stress: A theory of relevance to Black Americans. *Clinical Psychology Review, 11*, 685–702.

American Psychiatric Association. (2013). *Diagnostic and statistical manual of mental disorders* (5th ed.). Washington, DC: Author.

Carlson, E.B., & Dalenberg, C.J. (2000). A conceptual framework for the impact of traumatic experiences. *Trauma, Violence, & Abuse, 1*, 4-28.

Carlson, E. B. (1997). Trauma assessments: Clinician's guide. New York: Guilford.

Carter, R.T., & Sant-Barket, S.M. (2015). Assessment of the impact of racial discrimination and racism: How to use the race-based traumatic stress symptom scale in practice. *Traumatology, 21*, 32-39.

Carter, R.T., Mazzula, S., Victoria, R., Vazquez, R., Hall, S., Smith, S., Sant-Barket, S., Forsyth, J., Bazelais, K, & Williams, B. (2013) The development of the race-based traumatic stress symptom scale, *Psychological Trauma: Theory, Policy, Research, and Practice,* 5, 1-9.

Carter R. T., & Forsyth J. M. (2009). A guide to the forensic assessment of race-based traumatic stress reactions. *The Journal of the American Academy of Psychiatry and the Law, 37,* 28-40.

Carter, R. T. (2007) Racism and psychological and emotional injury: Recognizing and assessing race-based traumatic stress. *The Counseling Psychologist,* 35, 13-105.

Cheng, H. & Mallinckrodt, B. (2015). Racial/Ethnic discrimination, posttraumatic stress symptoms, and alcohol problems in a longitudinal study of Hispanic/Latino college students. *Journal of Counseling Psychology, 62*, 38-49.

Clark, R., Anderson, N. B., Clark, V. R., & Williams, D. R. (1999). Racism as a stressor for African Americans: A biopsychosocial model. *The American Psychologist, 54*, 805-816.

Coakley, J.J. (2007). Sport in society: Issues and controversies. 9th ed. New York: McGraw-Hill

Cokley, K. (2007). Critical issues in the measurement of ethnic and racial identity: A referendum on the state of the field. *Journal of Counseling Psychology*, *54*, 224-234.

Currie, C.L., Wild, T.C., Schopflocher, D.P., Laing, L., Veugelers, P., & Parlee, B. (2013). Racial discrimination, posttraumatic stress, and gambling problems among urban Aboriginal adults in Canada. *Journal of Gambling Studies, 29*, 393-415.

Dovidio, J. (2000) Racism. In Kazdin, A. (Ed.), *The encyclopedia of psychology* (Vol. 6, pp. 497-501). Washington, D.C.: Oxford University Press.

Erguner-Tekinalp, B. (2009). Daily experiences of racism and forgiving historical offenses: An African American experience. *International Journal of Humanities and Social Science, 4,* 1–9.

Flores, E., Tschann, J. M., Dimas, J. M., Pasch, L. A., & de Groat, C. L. (2010). Perceived racial/ethnic discrimination, posttraumatic stress symptoms, and health risk behaviors among Mexican American adolescents. *Journal of Counseling Psychology, 57*, 264–273.

Gillborn, D. (2005). Education policy as an act of White supremacy: Whiteness, critical race theory, and education reform. *Journal of Education Policy, 20,* 485-505.

Helms, J. E. “Introduction: Review of Racial Identity Terminology.” In J. E. Helms (ed.), *Black and White Racial Identity: Theory, Research and Practice*. Westport, Conn.: Praeger, 1993.

Jones, J. (1997) Prejudice and racism (2nd ed.) Washington, D.C: McGraw-Hill.

Kang, H.K. & Burton, D.L. (2014) Effects of racial discrimination, childhood trauma, and trauma symptoms on juvenile delinquency in African American incarcerated youth, *Journal of Aggression, Maltreatment & Trauma, 23*, 1109-1125,

Khaylis, A., Waelde, L., & Brice, E. (2007). The role of ethnic identity in the relationship of race-related stress to PTSD symptoms among young adults. *Journal of Trauma and Dissociation, 8*, 91–105.

Pierce, C.M. (1995). Stress analogs of racism and sexism. Terrorism, torture, and disaster. In C.V. Willie, P.P. Reiker, B.M. Kramer, & B.S. Brown (Eds.), *Mental health, racism, and sexism* (p. 277-293). Pittsburg: University of Pittsburg Press.

Pieterse, A. L., Carter, R. T., Evans, S. A., & Walter, R. A. (2010). An exploratory examination of the associations among racial and ethnic discrimination, racial climate, and trauma-related symptoms in a college student population. *Journal of Counseling Psychology, 57*, 255–263.

Robinson, J.L., & Rubin, J.L. (2015): Homonegative microaggressions and posttraumatic stress symptoms. *Journal of Gay & Lesbian Mental Health*.

Sanders-Phillips, K., Kliewer, W., Tirmazi, T., Nebbitt, V., Carter, T., & Key, H. (2014). Perceievd racial discrimination, drug use, and psychological distress in African American youth: A pathway to child health disparities. *Journal of Social Issues, 70*, 279-297.

Szymanski, D.M. & Balsam, K. (2011). Insidious trauma: Examining the relationship between heterosexism and lesbians' PTSD symptoms. *Traumatology, 17*, 4-13.

Torres, L. & Taknint, J.T. (2015). Ethnic microaggressions, traumatic stress symptoms, and Latino depression: A moderated mediational model. Journal of Counseling Psychology, 62, 393-401.

Wacquant, L. (2002). From slavery to mass incarceration: Rethinking the 'race question' in the US. *New Left Review 13*, 41-60.

Wei, M., Wang, K. T., Heppner, P. P., & Du, Y. (2012). Ethnic and mainstream social connectedness, perceived racial discrimination and posttraumatic stress symptoms. *Journal of Counseling Psychology, 59*, 486-493.

Williams, D. & Mohammed, S. (2009). Discrimination and racial disparities in health: Evidence and needed research. *Journal of Behavioral Medicine, 32*, 2-38.

2 EXPERIENCES OF RACISM AND RACE-BASED TRAUMATIC STRESS: THE MODERATING EFFECTS OF CYBER RACISM, RACIAL/ETHNIC IDENTITY, AND FORGIVENESS

Race is an elusive construct with profound real world impact. Attached to the characteristics of darker or lighter skin, straight, curly, or coiled hair are values, assumptions, and historical meanings. While race is not a biological reality, being classified as Black, Asian, Latinx, or Native American has never carried the same advantages as being considered White in the United States. Race has been used to justify attitudes, actions, and policies based on the belief that persons in one racial category are inherently superior to people in other categories. For example, in 2013 the Federal Bureau of Investigation (FBI) found that 3,407 single-bias hate crime offenses were racially motivated and of those offenses, 66.4 percent were motivated by anti-Black or African American bias.

According to Jones (1997), racism has three fundamental components. First, it is rooted in beliefs (i.e., stereotypes) about group differences that are assumed to reflect biological differences. Second, racism involves differentiated negative evaluations and feelings about the group relative to one's own (i.e., prejudice). Third, it reflects disparate treatment of groups by individuals and institutions in ways that are justified by and tend to perpetuate negative beliefs, attitudes, and outcomes (i.e., discrimination). People are not born with ideas about race, racism, or stereotypes. However, as people interact with each other and the environment, they learn to give meaning towards identities (Solorzano, Ceja, & Yosso, 2000).

Perceived racial discrimination is a daily stressor in the lives of African Americans. These experiences have been linked to psychological distress (Utsey et al., 2008), chronic stress (Williams & Mohammed, 2009), hypertension and diabetes (Salomon & Jagusztyn, 2008), and

refusal to seek health services (Lee, Ayers, & Kronenfeld, 2009). Due to the rise of social media, researchers have recently begun to investigate racist speech on the internet (Daniels, 2013; Hughey & Daniels, 2013). For example, the Southern Poverty Law Center (Potok, 2015) has found that while there has been a decline in active hate groups (e.g., Ku Klux Klan, Neo-Nazi) since 2013, it is likely attributed to a move toward cyberspace. Through online content, groups and individuals can broadcast their opinions across the world via the Internet and at the same time remain as anonymous as they choose. Use of the internet provides greater opportunity for anonymity, a deviation from societal norms, and disinhibition than is typical in face-to-face communication (Suler, 2004).

Experiences of racism are changing based on technological advances, and it is especially important to consider whether protective factors discovered in traditional research on racial discrimination also hold for people of color spending considerable time in online contexts (e.g., Internet, social media platforms, etc.). Tynes et al. (2012) describes online racial discrimination as denigrating or excluding an individual based on his or her race through use of symbols, voice, images, text, and graphic representations. Online racial discrimination occurs in social networking sites, chat rooms, discussion boards, text messaging web pages, online videos, music, and online games. For example, two European American males who represented the fraternity Sigma Alpha Epsilon (SAE) at the University of Oklahoma posted a party bus video that went viral in which they performed a racist chant with the lyrics “You can hang him from a tree, but he'll never sign with me. There will never be a ni**er at SAE” (see https://www.youtube.com/watch?v=nU-ZbjB00k8). Both online and offline experiences of racial discrimination denigrate the victim. Although sometimes perpetrators and victims know one

another, a pernicious aspect of online discrimination is that it often occurs anonymously or pseudoanonymously (i.e., a person is only known by their username; Glaser & Kahn, 2005).

Studying online racial discrimination has never been more critical. The first African American president has recently completed his second term in office, replaced by Donald Trump, who employed a political strategy that relied heavily on volatility of social media and evoking anger in conservative subgroups which are susceptible to xenophobic messaging. This stark political transition occurred after several years of increasing racial tension. Access to smartphones allowed almost anyone to document videos of racial discrimination. A variety of horrific videos went viral, including a series of deaths of African Americans at the hands of police officers. These events have given rise to a variety of activist initiatives, including perhaps most notably the Black Lives Matter movement. This racial and political turmoil has led to the potential for a high degree of political conflict on social media across multiple social networks. Indeed, there is little empirical research on how online exposure to racism affects African Americans. Accordingly, the purpose of the present study is to address this gap and the need for research explicitly focused on the influence of social media exposure to racism on the development of race based traumatic stress symptoms for African Americans, as well as exploring other potential moderators (e.g., racial identity, forgiveness) based on extant theory and research (Leach, Baker, & Ziegler-Hill, 2011; Sellers et al., 2006).

Evidence that Perceived Discrimination is Related to Post-Traumatic Symptoms

Racial discrimination is not only stressful, but recently it has been conceptualized as a relationship rupture that can evoke symptoms consistent with post-traumatic stress disorder (Bryant-Davis, 2005; Carter, 2007; Loo et al., 2001). Specifically, experiences of racism that are memorable, unexpected, and emotionally painful constitute a trauma (Carter et al., 2007;

Carlson, 1997), and ongoing experiences of discrimination (e.g., microaggressions) can compound stress and trigger ongoing stress responses (e.g., rumination). Although racial discrimination has been robustly linked with mental health (for a review, see Pieterse, Todd, Neville, & Carter, 2012) and physical health symptoms (Carter, Lau, Kirkinis, & Johnson, 2015), there is limited empirical work examining the link between perceived racial discrimination and post-traumatic stress.

Cyber Racism and Online Discrimination. Over the past few years, instances of racial violence have proliferated in the United States (e.g., Philando Castile, Sandra Bland, Michael Brown, Alton Sterling, Trayvon Martin, Oscar Grant, Tamir Rice, Jordan Davis, Freddie Gray, and Eric Garner). Although the Internet and social media may provide some advantages, such as connectedness, opportunities to seek social support, and engage in social activism, it also may force people to encounter a steady onslaught of exposure to potential triggers that may make emotional healing from prior offenses difficult. Indeed, the cyber world has created an entirely new arena for African Americans to encounter racism. *Racism No Way* (n.d.), an anti-racism education initiative designed to combat racism through education, defines cyberracism as (1) "a form of racial hatred in online public spaces and or vilification" and (2) "a form of cyber bullying, which is the use of information and communication technologies to support repeated and deliberate hostile behavior intended to harm others" (para. 2). Social media platforms (e.g., Twitter and Facebook) can amplify hate speech and discrimination because of the instantaneous nature of the medium and one-click sharing features (e.g., retweeting). We know from prior research that racial discrimination can be a daily stressor that contributes to psychological distress, well-being, physical health, negative attitudes toward mental health, and poor academic achievement in African Americans (Lee, Ayers, & Kronenfeld, 2009; Salomon & Jagusztyn,

2008; Utsey et al., 2008; Williams & Mohammed, 2009). As it relates to social media, studies have shown that recurrent or frequent social media use can influence depression and other mental health symptoms (Augner & Hacker, 2012; Bicham, Hswen, & Rick, 2015). Additionally, time spent using social media also increases the risk of exposure to social isolation, cyberbullying, and online racist content (Best, Manktelow, & Taylor, 2014; Bonilla & Rosa, 2015). Lastly, there have been several studies that have provided evidence of common and explicit interpersonal exchanges of overt and covert racist messages between internet users on social media platforms (Bonilla & Rosa, 2015; Chaudhry, 2015; Harrison, Janson, & Connolly, 2010; Tynes, Giang, Williams, & Thompson, 2008; Tynes, Reynolds, & Greenfield, 2004). Tynes et al. (2010), adapted an online victimization scale to assess individual and vicarious domains of interpersonal online racism for adolescents.

Internet usage is high among people of color, particularly within social networking context. For example, while African Americans make up approximately 13.5 % of the general population, they account for 25% of social media use (Edison Research, 2010). Thus, there is a need for research examining how experiences of racial discrimination online affects African Americans. Tynes et al. (2008) found that 71% of African American youth experience secondary online racial discrimination (witnessing same race/ethnicity peers being victimized) and 29% experience individual racism. Peer discrimination may have a serious impact on peer relations and on psychological adjustment (Rosebloom & Way, 2004). Initial research suggests that cyberracism is associated with negative mental health outcomes such as anxiety and depression in African American adolescents; however, ethnic identity and self-esteem buffer against these outcomes. (Tynes et al., 2012). Therefore, it is generally expected that higher online exposure

may strengthen the relationship between perceived discrimination and race-related post-traumatic stress.

Racial Identity. One factor that may buffer the relationship between perceived-racial discrimination and race-related post-traumatic stress is racial identity. Racial identity refers to "a sense of group or collective identity based on one's perception that he or she shares a common heritage with a particular racial group" (Helms, 1993, p.3). Research on racial identity provides insight regarding how experiences of racism may differ based on racial identity (Cokley, 2007). Racial identity can also partially explain why individuals may interpret and react to instances of racism differently, depending on their level of development.

Past research provides inconsistent findings regarding whether racial identity protects individuals experiencing racism from developing psychological symptoms. Some studies have supported this hypothesis. For example, in a sample of 307 adolescents, the relationship between trauma symptoms and delinquency was weaker in participants with higher racial/ethnic identity status (Bruce & Waelde, 2008). These findings converge with other work on the relationship between racial discrimination and the development of psychological symptoms in African Americans (Davis, Aronson, & Salinas, 2006; Oney, Cole, & Sellers, 2011; Neblett et al., 2012). Alternatively, some studies have found the opposite. For example, in a sample of 91 racial minorities, higher ethnic identity actually intensified the relationship between perceived racial discrimination and post-traumatic stress symptoms (Burrow & Ong, 2009; also see Khaylis, Waelde, & Bruce, 2007).

Forgiveness. A second factor that may buffer the relationship between perceived discrimination and race-related stress is forgiveness. Forgiveness is defined as the reduction of negative and sometimes the increase in positive thoughts, feelings, and motivations towards an

offender (Exline et al., 2003; Fehr et al. 2010; Karremans & Van Lange, 2008). Forgiveness has been robustly linked to positive mental health benefits (Fehr et al., 2010; Davis et al., 2015). In a racially divided society such as the United States, the concepts of reconciliation, public apology, and the offering and acceptance of forgiveness are important topics for scientific inquiry. For example, after the racially motivated shooting of nine African Americans at a church in Charleston, South Carolina, some congregants quickly communicated a decision to forgive the perpetrator. This sparked considerable controversy regarding whether forgiveness might be potentially harmful to some people, especially when it occurs so quickly after a major tragedy. Research has illustrated that religion/spirituality serves as a buffer against experiences of discrimination (Bierman, 2006; Odom & Vernon-Fargas, 2010). Despite over a thousand studies on forgiveness, only a few studies have examined forgiveness as a way of coping with racial discrimination (e.g., Davis et al., 2015). Public apology and accepting offers of forgiveness may serve as a balm for healing the wounds of both the oppressed and the oppressor, but it is important to explore the contexts in which forgiveness as coping is more or less helpful for African Americans.

The Present Study

The purpose of the present study is to examine three hypothesized moderators on the relationship between perceived racial discrimination and traumatic stress reactions. Extending Carter's (2007) model of race-based-traumatic stress, I hypothesize that perceived racial discrimination will maintain and increase symptoms of race-based traumatic stress regarding daily occurrences or severe instances of racism. Prior research provides evidence that perceived racial discrimination is related to negative mental health outcomes such as depression, increased

substance use, and anxiety (Williams & Mohammed, 2009). I also expected that perceived racism or racial discrimination would be positively related to trauma related symptoms.

I examined one construct expected to amplify, as well as two constructs expected to buffer, this relationship. Specifically, I hypothesize that higher exposure to cyberracism will amplify the relationship between perceived racial discrimination and race-based traumatic stress. I expect this to occur based on previous findings of perceived racial discrimination, trauma symptoms, and experiences with online discrimination (Pieterse & Carter, 2010; Tynes et al., 2012). Alternatively, I hypothesize that higher levels of racial identity, as well as forgiveness will serve as a protective factor, buffering African Americans from the relationship between perceived racial discrimination and race-based traumatic stress. These hypotheses are consistent with other research that has found racial/ethnic identity and spirituality to buffer the effects of chronic physical and mental health problems (Bierman, 2006; Wink et al., 2005).

Method

Participants

Participants were 397 Black/African American adults recruited through an online survey. Ages ranged from 18 to 66 years, with a mean of 32.73 (*SD* = 9.52). Participants were 55.9% of female (*n* = 222) and 44.1% of male (*n* = 175). In terms of religious/spiritual identity, most identified as Christian (71.3%, *n* = 283); others identified as Agnostic (10%, *n* = 40), Atheist (6%, *n* = 24), or Other (7.6%, *n* = 30). Participants reported completing some college (42.3%, *n* =168), a bachelor's degree (39.3%, *n* = 156), or graduate work (9.6%, *n* = 38).

Procedure. The current study employed a cross-sectional, correlational design. The Institutional Review Board at Georgia State University approved the methods for the current study. Participants completed an online survey through Amazon Mechanical Turk (M-Turk).

Mechanical Turk functions as a crowdsourcing internet marketplace for the work and completion of Human Intelligence Tasks (HITs). In general, M-Turk participants are more demographically diverse than standard internet samples and significantly more diverse than American college samples (Buhrmester, Kwang, & Gosling, 2011). Recruitment via M-Turk relies on self-selection, and participants log onto M-Turk's secured website with a user ID and password. Participants or M-Turk workers can browse a diverse list of HITs (e.g., research studies, data input tasks) uploaded by M-Turk requesters (e.g., researchers). The HIT for this study was described as, "A survey about experiences with racism." The survey contained measures of variables that assessed perceptions of racism and the relationship between race based traumatic stress symptoms, cyber racism, racial/ethnic identity, and forgiveness.

Once a participant agreed to participate in the study, the participant was directed to a link embedded in the description of the study to Qualtrics. Thereafter, participants were asked to indicate consent (e.g., 18+) and answer one inclusionary questions to ensure they met the study's participant eligibility criteria. The question asked, "How do you self-identify?" and presented the following choices: a) African American/Black b) White/Caucasian c) Hispanic/Latino d) Asian and e) Other. If participants selected "African American," they were sent to the survey which included demographic questions and several questionnaires related to perceptions of racism, traumatic stress reactions, cyber racism, racial identity, and forgiveness. All other responses directed the participant to the disqualification page, which thanked them for their interest and explained that they had been disqualified. The current study was interested in perceptions of African Americans, therefore, participants who did not identify as African American/Black were excluded. Once participants completed the study, they received .50 cents worth of Amazon dollars for participating in the study.

Measures

Racial discrimination. Perceived racial discrimination was assessed with the 17item Frequency subscale of the Schedule of Racist Events (SRE; Landrine & Klonoff, 1996; see Appendix E). The SRE has three subscales: (*a*) Frequency of Current (in the past year) racist events; (*b*) Frequency of Lifetime racist events; and (*c*) Appraisal of the degree of stressfulness of the events. For this study, only the Frequency of Current (in the past year) racist events subscale was used. Each of these items are rated on a 6-point Likert-type scale with the following anchors: 1 = Never Happened; 2 = Once in a While (less than 10% of the time); 3 = Sometimes (10–25% of the time); 4 = A Lot (26–49% of the time); 5 = Most of the Time (50–70% of the time); and 6 = Almost all of the Time (more than 70% of the time). The items are scored on a six-point summated rating scale. Scores can range from 18 to 108 for the frequency subscales; higher scores indicate higher frequency of racist events. An example item is, "How many times have you gotten into an argument or a fight about something racist that was done to you or done to somebody else?" Evidence of the SRE's validity has been observed in relation to the African American Acculturation Scale (Landrine & Klonoff, 1994) and mental health among African Americans (Klonoff, Landrine, & Ullman, 1999). The SRE demonstrated evidence of reliability with Cronbach's alpha coefficients ranging from .94 to .95 (Klonoff & Ladrine, 1999). For the present study, the Cronbach's alpha coefficient for the Frequency subscale was .94.

Race-based traumatic stress. Race-based traumatic stress was assessed with the 52-item Race-Based Traumatic Stress Symptom Scale (RBTSSS, Carter et al., 2013; see Appendix E). It has seven subscales: depression, intrusion, anger, hypervigilance, physical reactions, self-esteem, and avoidance. Participants begin by describing up to three of the most memorable events of racial discrimination, and then they focus on the most memorable for the remainder of the

questions. Regarding this event, respondents answer how they were feeling right *after the event* (within one month) and *more recently* or *now* when thinking about the event." For this study, only the Recent Reactions scales were used. Participants rate items using a 5-point Likert scale, ranging from 0 = *Does not describe my reaction* to 4 = *This reaction would not go away*. Items are summed for the subscales and higher scores indicate greater presence of that reaction. An example item is "As a consequence of the memorable encounter I had with racism, I was in a state of nervous tension." The RBTSSS showed evidence of reliability; the Cronbach alpha coefficient for Depression was .90; Intrusion, .89; Anger, .91; Hypervigilance, .91; Physical reactions, .87; Self-esteem, .85; and Avoidance, .66). This scale shows evidence of construct validity (Carter & Muchow, 2017), being related to classes of racism and psychological outcomes (i.e., anxiety, depression, loss of control). For the present this study, the Conbach's alpha coefficient for the Recent Reaction subscale was .98.

Racial identity. Racial/ethnic identity was assessed with the 14-item version of the Multigroup Ethnic Identity Measure (MEIM; Phinney, 1992; see Appendix E). The MEIM measures three aspects of identity: affirmation and belonging, ethnic identity achievement, and ethnic behaviors. It also consists of an open-ended question that elicits self-identification and a choice of an ethnic category from a list of ethnic groups. Participants rate items on a 4-point Likert scale with response options ranging from 1 = *Strongly disagree to* 4 = *Strongly agree*. A sample item is "I often spend time with people from ethnic groups other than my own." The MEIM had Cronbach's alphas above .80 across a wide range of ethnic groups and ages (Phinney, 1992). The scale shows evidence of construct validity, being related to African Americans' self-esteem, acculturation, and vocational maturity (Ponterotto, Casas, Suzuki, & Alexander, 2001). For the present study, the Cronbach's alpha coefficient was .92.

Trait forgiveness. A tendency to forgive across offenses and relationships was assessed with the 10-item Trait Forgivingness Scale (TFS; Berry, Worthington, O'Connor, Parrott, & Wade, 2005; see Appendix E). Participants are instructed to indicate their agreement with each item on a 5-point Likert scale from 1 = *Strongly disagree* to 5 = *Strongly agree*. An example item is, "I can usually forgive and forget an insult." The TFS had Cronbach's alphas ranging from .74 to .80 (Berry et al., 2005). The scale shows evidence of construct validity, correlating positively with agreeableness, empathic concern, and perspective taking, and correlating negatively with anger, rumination, and hostility (Berry et al., 2005). For the present study, the Cronbach's alpha coefficient was .79.

Cyberracism. Perceptions of online racial discrimination were assessed with the 15-item Cyber Racism Scale (CRS; Jordan, Davis, DeBlaere, Owen, Hook, & Cokley, 2016; see Appendix E). The CRS was developed for this study. The survey consists of questions that are designed to assess online social activities that result in offensive content and comments in relation to a person's race/ethnicity. The CRS has four subscales: Racial Negativity, Angry Reactions, Fear for Safety, and Limiting Exposure. Participants rate items on a 6-point Likert scale ranging from 1 = *I have never experienced this event* to 6 = *I experience this event several times per day*. Participants are then asked to rate how upsetting the event is on a 6-point scale ranging from 1 = *not at all upset* to 6 = *extremely upset*. Items are summed in which higher scores indicate greater presence of experiences of cyberracism. An example item is, "I have strongly considered not using social media in order to avoid racial negativity." To provide evidence of content validity for the CRS, a definition of cyberracism and initial items were sent to five expert reviewers. Exploratory and Confirmatory factor analyses were conducted on this measure. In the current study, the Cronbach's alpha coefficients ranged from .77 to .92.

Results

Preliminary Analysis

The Statistical Package of Social Sciences (SPSS) 23.0 was used to generate an electronic data set and conduct all analyses. This study employed a quantitative cross-sectional research design where perceptions of racism served as the independent or predictor variable, race-based traumatic stress symptoms served as the dependent or outcome variable, and racial/ethnic identity, forgiveness, and cyberracism served as moderating variables. The original sample consisted of 652 participants. Upon examination of these cases, 255 were deleted due to the participants not passing two out of three validity items in the survey.

Assumption testing. There are several assumptions of regression analyses (e.g., little to no multicollinearity, homoscedasticity, linear relationships; Tabachnick & Fidell, 2001). Of the 397 participants remaining in the data set, missing value analysis was conducted. Little's MCAR test was significant (X^2 [35475] = 37232.01, $p < .001$), indicating that the data were not missing completely at random (MCAR). Since the data is not MCAR, we can assume that the data is missing at random (MAR), meaning there is a systematic relationship between the propensity of missing values and the observed data, but not the missing data. Whether an observation is missing has nothing to do with the missing values, but it does have to do with the values of an individual's observed variables. Data "missing completely at random" and "missing at random" are considered "ignorable"; no information should be included about the missing data itself. Based on recommendations by Schlomer, Bauman, and Card (2010), expectation maximization was utilized to impute values for missing data.

Outliers are observations or data points that are distant from other observations. Outliers are outside of the norm for a given variable or population. Outliers are typically due to variability

in the measurement or it may indicate an experimental error. Univariate outliers were explored by examining the standardized values of each variable against suggested cutoff scores (i.e., 3 or more standard deviations above the mean) discussed by Van Selst and Jolicoeur (1994). There were no outliers in the data.

The assumption of homoscedasticity, meaning same variance, describes an instance in which the error term (e.g., disturbance in the relationship between predictor and outcome variables) is the same across all values of the independent variable. In other words, data points will be almost equally dispersed around the regression line. To test homoscedasticity, a residual scatterplot for each predictor variable was created to verify if the data points were approximately equal in width at all values of the dependent variable (Tabachnick & Fidell, 2001). The assumption of homoscedasticity was met.

I also examined univariate and multivariate normality of variables. Univariate normality refers to data points of variables that are normally distributed according to the standard normal distribution. This must be examined before examining multivariate normality—the assumption that the predictor variables have a linear relationship with the dependent variables must be met. In this study, univariate and multivariate normality was met in the sample. In addition, skewness and kurtosis were also examined. Skewness is the symmetry of the distribution and kurtosis is the peakedness of the distribution. This is examined to determine if the distribution is departing from normality. In this study, all variables met assumptions of normality (skewness index < 3, kurtosis index < 10; Weston & Gore, 2006).

Evaluation of Primary Hypotheses

I hypothesized that perceptions of racism or racial discrimination would be positively correlated to race-based traumatic stress symptoms. To test this hypothesis, Pearson's product-

moment correlation was run to assess the relationship between perceptions of racism and race-based traumatic stress symptoms. Means, standard deviations, bivariate correlations, and Cronbach's alpha values for variables in the current study are presented in Table 2 (see Appendix A). As predicted, there was a positive correlation between current racist events and recent RBTS ($r = .61$, $p = \leq .001$).

I also hypothesized that cyberracism would amplify the relationship between racial discrimination and race-based traumatic stress symptoms, such that higher levels of cyberracism would strengthen this relationship. To test this hypothesis, I conducted a regression analyses with centered conditional main effects entered in a first step and an interaction term entered in a second step (Hayes, 2008). The first regression analysis examined whether cyberracism moderated the relationship between perceptions of racism and race-based traumatic stress symptoms. The results are presented in Table 3 (See Appendix A). The conditional main effects of perceptions of racism and cyberracism accounted for 42% of the variance in Step 1 ($R^2 = .42$, $p = .000$), and the interaction term accounted for an additional 0.7 percent of the variance in Step 2 ($\Delta R^2 = .007$, $p = .029$. The conditional main effect of cyber racism on race-based traumatic stress symptoms was significant ($B = .13$, $p = .001$). The interaction term was also significant ($B = .04$, $p = .029$). To interpret the interaction effect, we conducted simple slope analyses (see Figure 1), which revealed that at low levels of cyber racism (i.e., -1 *SD*), the effect of perceptions of racism was significant ($B = .32$, $p = .000$). In addition, at higher levels of cyber racism (i.e., +1 *SD*), perceptions of racism were associated with greater symptoms of race based traumatic stress ($B = .44$, $p < .001$).

My third hypothesis was that racial/ethnic identity would buffer the relationship between racial discrimination and race-based traumatic stress symptoms, such that higher levels of

racial/ethnic identity would weaken this relationship. To test this hypothesis, I conducted a regression analyses with centered conditional main effects entered in a first step and an interaction term entered in a second step (Hayes, 2008). The conditional main effects of perceptions of racism and racial identity accounted for 38% of the variance in Step 1 (R^2 = .38, p = .000), and the interaction term accounted for an additional 0.1% of the variance in Step 2 (ΔR^2 = .001, p = .407)—this was not significant. The conditional main effect of racial identity on race based traumatic stress symptoms was not significant (B = .03, p = .479). Simple slope analyses were run to examine the non-significant finding (see Figure 2).

My fourth and final hypothesis was that forgiveness would buffer the relationship between racial discrimination and race-based traumatic stress symptoms such that higher levels of forgiveness would weaken this relationship. Therefore, the last regression analysis examined forgiveness as a moderator. To test this hypothesis, I conducted a regression analyses with centered conditional main effects entered in a first step and an interaction term entered in a second step (Hayes, 2008). The conditional main effects of perception of racism and forgiveness accounted for 39% of the variance in Step 1 (R^2 = .39, p < .001), and the interaction term accounted for an additional .06% of the variance in Step 2 (ΔR^2 = .006, p = .037). The conditional main effect of forgiveness on race based traumatic stress symptoms was not significant (B = -.01, p = .809). The interaction term was significant (B = -.08, p = .037). To interpret this effect, we conducted simple slope analyses (see Figure 3), which revealed that at low levels of forgiveness (i.e., -1 *SD*), the effect of perceptions of racism was significant (B = .54, p = .000). In addition, at higher levels of forgiveness (i.e., +1 *SD*), perceptions of racism were associated with lesser symptoms of race-based traumatic stress (B = .41, p = .000)

Discussion

The purpose of the present study was to examine several theorized moderators of the degree to which racial discrimination leads to race-based traumatic stress. Since Carter (2007) extended the concept of posttraumatic stress to the area of relational ruptures due to racism, little work has explored factors that can intensify or buffer the relationship between experiences of discrimination and the development of race-based traumatic stress. I hypothesized that perceptions or experiences of racism would be related to trauma reactions. Correlational analyses revealed that perceptions of racism were significantly related to race-based traumatic stress symptoms. These findings are consistent with Carter's theory and research, which suggest racism predicts race-based traumatic stress symptoms (Carter, 2007, 2016).

The link between perceived discrimination and race-based trauma adds to the overall literature that demonstrates the impact of racism on mental health outcomes of African Americans (for a review, see Pieterse, Todd, Neville, & Carter, 2012). Research has documented that racism can lead to increased arousal states (e.g., anxiety, hypervigilance), somatization, interpersonal sensitivity, obsessive compulsive symptoms, and lasting emotional effects that reflect traumatic reactions (Bennett, Merritt, Edwards, & Sollers, 2004; Carter, Forsyth, Mazzula, & Williams, 2005; Harrell, Hall, & Taliaferro, 2003; Klonoff, Landrine, & Ullman, 1999). The findings in this study corroborate the mounting evidence linking perceived discrimination with trauma symptoms.

I evaluated one new factor hypothesized to intensify the relationship between perceived racial discrimination and race-based traumatic stress symptoms, such that higher levels of cyberracism strengthened this relationship. This hypothesis was supported. These findings extend those of Tynes et al. (2012), who found online racial discrimination to be positively

related to poor mental health outcomes (e.g., depression, anxiety, lower self-esteem). Converging findings also occur in work in the broader arena of cyberbullying and its effects on mental health (for a review, see Edwards, Kontostathis, & Fisher, 2016). Namely, studies have demonstrated that cyberbullying can intensify the relationship between bullying victimization and mental health symptoms. For individuals who have already experienced a severe racial trauma, social media provides an ever present source of potential triggers for additional trauma reactions. Given the dearth of research in this area, very little is known about the particular types of social media behavior that might limit exposure. Furthermore, there is little direct knowledge available about the degree to which exposure to cyberracism can serve as a primary cause of traumatic reactions.

I evaluated two theorized protective factors. The first was racial/ethnic identity, which I assessed with the MEIM. This hypothesis was not supported. Perceived racial discrimination showed a similarly strong relationship with race-based traumatic stress, regardless of one's degree of racial/ethnic identity development. This finding joins the equivocal research on racial/ethnic identity as a potential moderator of the link between racial discrimination and mental health symptoms (for a review, see Pascoe & Richman, 2009). Null effects are difficult to interpret, because results may be affected by a variety of methodological factors, such as factors associated with the sample, way of measuring racial/ethnic identity (e.g., Cokley, 2007), or elements of research design.

That said, should this finding replicate across other studies, it would provide support for rejection sensitivity theory (Downey & Feldman, 1996; Downey, Khouri, & Feldman, 1997). According to this theory, rejection (e.g., racial discrimination) experienced by individuals can result in them feeling less connected and psychological overwhelmed. The more someone identifies with a group, the greater the potential for feeling disconnected and distressed when this

identity is maligned. This theory provides one possible account for why researchers have sometimes found that having a stronger racial/ethnic identity can actually exacerbate the negative effects of racial discrimination (e.g., Yoo & Lee, 2008).

The second protective factor I evaluated was trait forgivingness. This hypothesis was supported. Forgiveness buffered the relationship between perceived racial discrimination and race-based traumatic stress. This finding converges with other work in which forgiveness buffered the relationship between discrimination and depression (Powell, Banks, & Mattis, 2016). In addition, Burrow and Hill (2012) examined potential moderators (e.g., racial group membership) for forgiveness in the context of racial microaggressions. They found that dispositional forgiveness attenuated the likelihood of experiences of discrimination and was associated with lower levels of negative affect and greater cognitive performance.

Importantly, forgivingness weakly correlated with both perceived discrimination and race-based traumatic stress. These relationships corroborate theorizing by Davis et al. (2015) that racial/ethnic minorities may adopt different strategies related to forgiveness. It stands to reason that more hostile racial environments might lead individuals and communities to adopt more conservative (careful forgiveness) strategies regarding forgiveness of racially privileged individuals or groups. My findings also align with research finding that African Americans who were hypervigilant and had concern about being rejected due to their race were less likely to forgive the perpetrator of racism (Henson, Derlega, and Pearson, 2013). Very little is known about how daily experiences of discrimination can potentially influence people's strategies of forgiveness. However, preliminary evidence suggests that experiencing microaggressions can cause unforgiving motivations, which the authors interpreted less as a coping strategy and more as an outcome (Schoulte, Schultz, & Altmaier 2011).

More work is needed to contextualize forgiveness among other coping strategies for dealing with experiences of discrimination. When faced with racially stressful situations, African Americans typically engage in more problem-solving and emotion-focused coping strategies compared with Whites (Plummer & Slane, 1996). Generally, research on forgiveness is framed very positively, noting links to health and mental health (e.g., Toussaint, Williams, Musick, & Everson-Rose, 2008; Tse & Yip, 2009). It can empower targets of offenses to reduce negative rumination and sever the degree to which they repeatedly relive the offense in their minds.

That said, there are a plethora of cautions and qualifications needed when considering forgiveness with victims vulnerable to continued exploitation. It would be cruel and victim-blaming the victim to place the onus of responsibility on targets of discrimination for their ongoing struggle and pain. Our ideas reject such lines of thought directly. Forgiveness is not excusing, condoning, justifying, accepting, forgetting, or just "moving on" from racism. Likewise, when contextualizing theories of forgiveness to the context of racism, it is important to carefully consider embedded power dynamics. For example, McCullough's evolutionary theory (2003) suggests that appraisals of value and potential for exploitation are the two factors that most directly influence the likelihood of forgiveness. In the context where a society has a movement that states something so basic as "Black Lives Matter," there is a fundamental and systemic message of devaluation of Blackness that undermines forgiveness. Likewise, when a society adopts xenophobic discourse as relatively consequence free or acceptable behavior, it sends clear messages regarding the potential for exploitation.

Therefore, I am illustrating how one expends their energy is an important factor in managing negative emotions due to racism. Others have suggested that lower forgiveness for the perpetrator may be adaptive (Henson et al., 2013). For example, Powell, Banks, & Mattis (2016)

note that when there is no opportunity for remediation or social justice, "granting forgiveness by generating positive thoughts and emotions may have little protective benefit or even unintended, negative mental health consequences for African American men" (p.12). Further research is needed to explore what responses are adaptive in racial situations. In general, forgiveness plays an important role in how African Americans perceive and react to experiences of racism.

Clinical Implications

The present study has important clinical implications. First, results from this study suggest that social media use puts one at risk to experience cyberracism or online discrimination. Furthermore, one's experiences of racialized content via social media can lead to an increased likelihood of developing race-based traumatic stress symptoms. These findings highlight the importance of future research on the nature and treatment of race-based traumatic stress in African American populations.

Second, given the evidence for the buffering effects of forgiveness, when seeing African American clients with symptoms of race-based traumatic stress (e.g., depression, anger, hypervigilance, intrusions, low self-esteem), clinicians may want to consider forgiveness-related themes. For example, appraisals of devaluation and exploitation with clients, how clients try to metabolize these very painful experiences, and brainstorming ways to empower clients to find the strength within themselves and their communities to move forward with fortitude. These situations can put therapists at their limits of cultural comfort and humility. Yet, conversations about racial offenses are ripe for deepening the relationship through exploring the client's racial identity, as well as how it may intersect with other identities such as religion or spirituality. It is all too easy to draw back and avoid taking any risks as therapists, but many clients have a variety

of strengths and resources at their disposal. However, but because of pain, they may need human connection and encouragement in order to draw on the strengths under duress.

Limitations and Future Research

The current study had several limitations. First, participants in this study all self-identified as African American. It is important to note that race is a complex concept and there is much within group heterogeneity that exists that should be further explored. The ways in which racial trauma is understood or experienced could potentially vary by gender, sexual orientation, or other intersecting identities. Future research should examine these factors.

Second, I used a cross-sectional, correlational design and only employed self-report methods. Self-report measures can lead to well-established problems associated with response bias (Dorn et al., 2014). It would be helpful to conduct future research that examines proximal reactions to witnessing cyberracism within the lab and while being monitored by physiological measures (e.g., heart-rate variability, cortisol levels, etc.). For example, researchers might develop a methodology that involved having people read through the first 100 posts on their Facebook feed. Tracking participants' reactions and having trained coders rating the content could give a clearer picture of how online exposure interacts with other characteristics of the individual (e.g., identity, personality) to affect their stress response. Most likely individuals who become more resilient to online exposure practice certain mental habits (and perhaps behavioral habits, such as unfriending people or setting other limits on their exposure) that facilitate mental health. Right now, psychologists would have little direct research available to inform suggestions for online engagement, especially during periods of racial crisis (e.g., after a high-profile incident).

Third, it is worth noting the context in which data from this study was collected. On one hand, we used convenience samples collected online, which may have resulted in selection effects that are difficult to examine. At the same time, the study occurred in a unique racial and sociopolitical environment. The Black Lives Matter movement had existed for over a year. Deaths of Black men were accumulating. Also, when it seemed like the United States might elect its first female president, Donald Trump won. The election was unique in its reliance on social media for non-traditional strategies of marketing. Trump seemed to actually take advantage of the potential for media identity to drive social media behavior. Thus, the environmental context not only demonstrates the need for future work in this area, but also presents some scientific challenges for understanding how the rapidly changing social context may have influenced these results.

Fourth, my design did not allow tests of causal relationships. Experimental or longitudinal designs would provide stronger tests of the direction of the relationship between discrimination, ongoing discrimination, and ongoing race-based traumatic responses. Theories focused on mechanisms will provide more precise knowledge to inform the development of interventions designed to help African Americans and other racial/ethnic minorities cope with race-based traumatic stress reactions.

Fifth, my study employed quantitative methods. However, it is also important to note that all African Americans do not share the same lived experience. Qualitative research might be helpful in exploring ways in which Black people's experiences with racism, RBTSS, social media, racial identity, and forgiveness are subjective.

Conclusion

Racism in our society continues to be problematic as evidenced by the current racial climate. The findings in this study contribute to the body of literature that has illustrated psychological distress can result from racism. The results of this study have also provided us with new information about exacerbative and protective factors. The rapid advancement and access of internet technology (i.e., social media) has significantly shaped the ways in which people perpetuate, maintain, and perceive racism. Therefore, it is with hopes that this understanding calls for more responsible norms and policies that relate to social media that I present in this research. This study also highlights the importance of other protective factors like forgiveness, as racial/ethnic identity may not always be able to buffer against different types of racial discrimination.

Tables and Figures

Table 2
Means, standard deviations, N, alphas, and intercorrelations of variables

	M	*SD*	*N*	1	2	3	4	5	6	7
1. Frequency of Current Racist Events	2.81	1.05	397	1	.74**	.61**	.61**	.491**	-0.03	.18**
2. Lifetime Frequency of Racist Events	2.12	0.71	397		1	.46**	.55*	.48**	-0.08	.12**
3. RBTSS After Event	2.19	0.94	397			1	.81**	.39**	0.06	.10**
4. RBTSS More Recently	1.86	0.80	397				1	.46**	0.00	.12*
5. Exposure to Cyber Racism	3.18	1.31	397					1	-.20**	0.95
6. Ethnic Identity	1.90	0.64	397						1	.14**
7. Forgiveness	2.78	0.74	397							1

** = $p < .05$; ** = $p < .01$*

Table 3
Regression Analyses

Variables		B	*SE*	*t*	*p*
Race based traumatic stress on perceptions of racism and cyber racism					
Intercept	i_1	1.829	0.033	53.981	0.000
Perceptions of Racism (*X*)	b_1	0.384	0.034	11.301	0.000
Cyber Racism (*M*)	b_2	0.130	0.027	4.842	0.000
SRE x Cyber Racism (*XM*)	b_3	0.046	0.021	2.188	0.029
		R^2 = .4221, MSE = .3740			
		$F(3, 393) = 95.68$, $p < .001$			
Race based traumatic stress on perceptions of racism and racial identity					
Intercept	i_1	1.862	0.031	58.799	0.000
Perceptions of Racism (*X*)	b_1	0.468	0.030	15.304	0.000
Ethnic Identity (*M*)	b_2	0.034	0.049	0.708	0.479
SRE x Ethnic Identity (*XM*)	b_3	0.033	0.040	0.828	0.407
		R2 = .3852, MSE = .3978			
		$F(3, 393) = 82.08$, $p < .001$			
Race based traumatic stress on perceptions of racism and forgiveness					
Intercept	i_1	1.874	0.032	58.379	0.000
Perceptions of Racism (*X*)	b_1	0.478	0.030	15.523	0.000
Forgiveness (*M*)	b_2	-0.010	0.045	-0.241	0.809
SRE x Forgiveness (*XM*)	b_3	-0.087	0.041	-2.088	0.037
		R2 = .3903, MSE = .3945			
		$F(3, 393) = 83.85$, $p < .001$			

Note. Perceptions of Racism = Schedule of Racist Events (SRE); Ethnic Identity = Multigroup Ethnic Identity Measure (MEIM); Forgiveness = Trait Forgiveness Scale (TFS); Cyber Racism = Cyber Racism Scale (CRS).

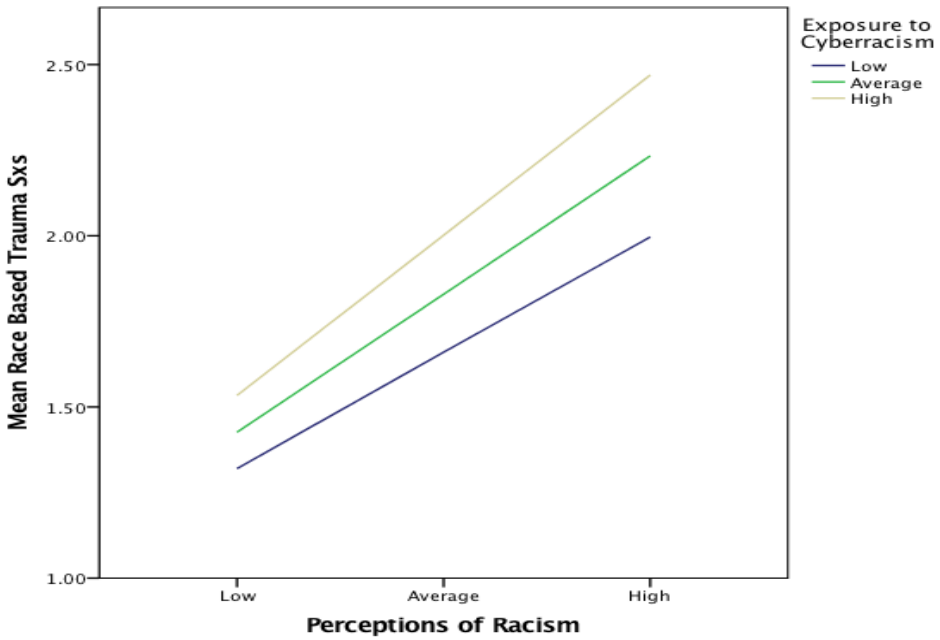

Figure 1. Graph of Interaction of Exposure to Cyber Racism with Perceptions of Racism on Race Based Traumatic Stress Symptom Scores

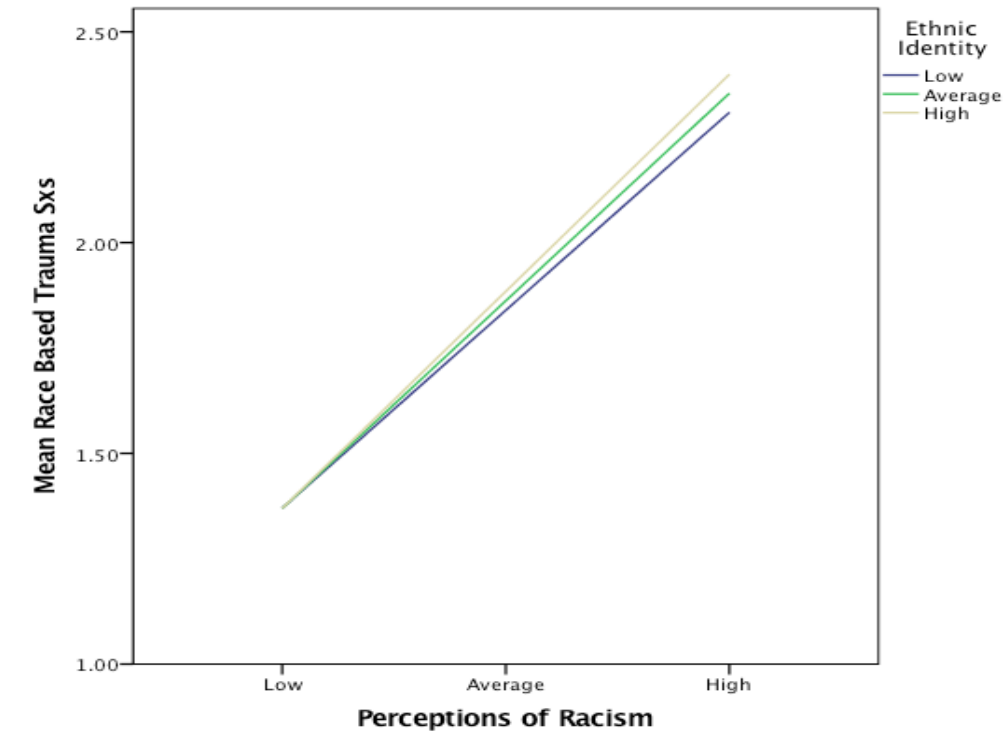

Figure 2. Graph of Interaction of Ethnic Identity with Perceptions of Racism on Race Based Traumatic Stress Symptom Scores

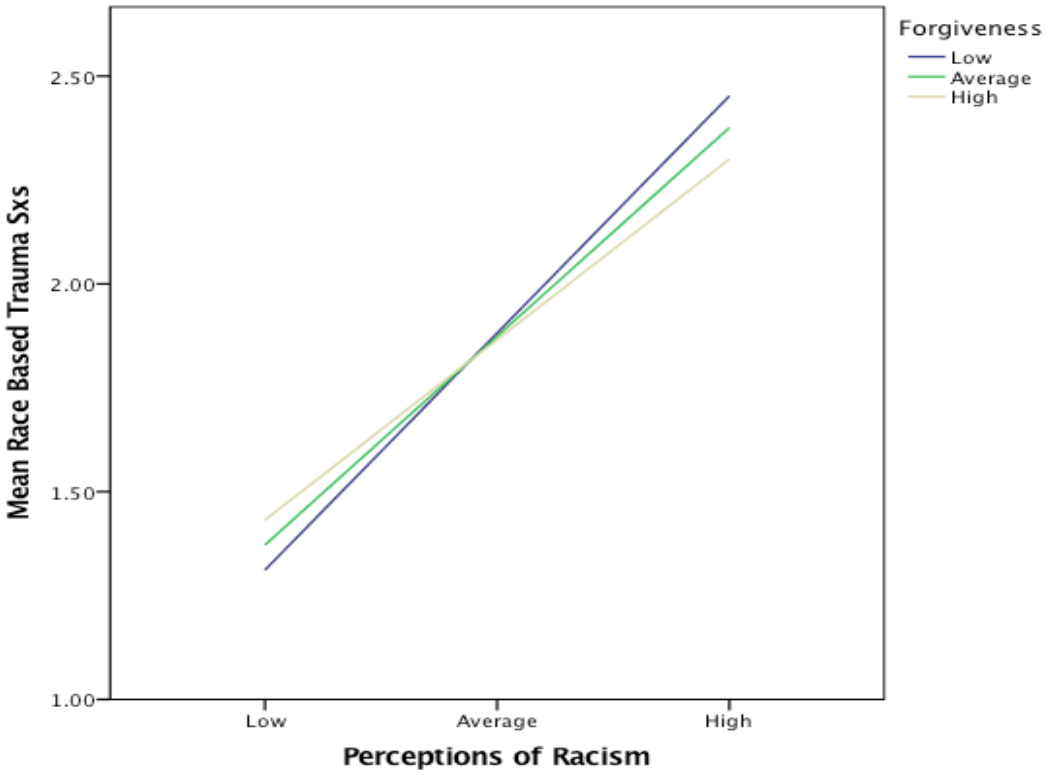

Figure 3. Graph of Interaction of Forgiveness with Perceptions of Racism on Race Based Traumatic Stress Symptom Scores

References

Augner C., Hacker, G. (2012). Associations between problematic mobile phone use and psychological parameters in young adults. *Int J Public Health, 57*, 437–441.

Berry, J. W., Worthington, E. L., Jr., O'Connor, L. E., Parrott, L., & Wade, N. G. (2005). Forgivingness, vengeful rumination, and affective traits. *Journal of Personality, 73*, 183-226.

Best, P., Manktelow, R., & Taylor, B. (2014). Online communication, social media and adolescent wellbeing: A systematic narrative review. *Children and Youth Services Review, 41*(8), 27-36.

Bickham, D., Hswen, Y., & Rich, M. (2015). Media use and depression: exposure, household rules, and symptoms among young adolescents in the USA. *International Journal of Public Health, 60*, 147-155.

Bierman, A. (2006). Does religion buffer the effects of discrimination in mental health? Differing effects by race. *Journal for the Scientific Study of Religion, 45,* 551-565.

Bonilla, Y., & Rosa, J. (2015). # Ferguson: Digital protest, hashtag ethnography, and the racial politics of social media in the United States. *American Ethnologist, 42,* 4–17. http://dx.doi.org/10.1111/amet.12112

Bruce, E. & Waelde, L. (2008). Relationships of ethnicity, ethnic Identity, and trauma symptoms to delinquency. *Journal of Loss and Trauma, 13*, 395-405.

Bryant-Davis, T., & Ocampo, C. (2005). Racist-incident-based trauma. *The Counseling Psychologist, 33*, 479-500.

Burrow, A., & Hill, P. (2012). Flying the unfriendly skies?: The role of forgiveness and race in the experience of racial microaggressions. *The Journal of Social Psychology, 152,* 639-653.

Burrow, A.L., & Ong, A.D. (2010). Racial identity as a moderator of daily exposure and reactivity to racial discrimination. *Self and Identity, 9,* 383-402. http://dx.doi.org/10.1080/15298860903192496

Carlson, E. B. (1997). Trauma assessments: Clinician's guide. New York: Guilford.

Carter R. T., and Lau M. Y., Kirkinis, K., & Johnson, V., (2015) Racial Discrimination and Health Outcomes Among Racial-Ethnic Minorities: A Meta-Analytic Review. Manuscript submitted for publication

Carter, R.T., & Sant-Barket, S.M. (2015). Assessment of the impact of racial discrimination and racism: How to use the race-based traumatic stress symptom scale in practice. *Traumatology, 21*, 32-39.

Carter, R.T., Mazzula, S., Victoria, R., Vazquez, R., Hall, S., Smith, S., Sant-Barket, S., Forsyth, J., Bazelais, K, & Williams, B. (2013) The development of the race-based traumatic stress symptom scale, *Psychological Trauma: Theory, Policy, Research, and Practice,* 5, 1-9.

Carter, R. T. (2007) Racism and psychological and emotional injury: Recognizing and assessing race-based traumatic stress. *The Counseling Psychologist,* 35, 13-105.

Chaudhry, I. (2015). # Hashtagging hate: Using Twitter to track racism online. *First Monday*. Advance online publication. http://dx.doi.org/10 .5210/fm.v20i2.5450

Cokley, K. (2007). Critical issues in the measurement of ethnic and racial identity: A referendum on the state of the field. *Journal of Counseling Psychology, 54,* 224-234. DOI: 10.1037/0022-0167.54.3.224

Daniels, J. (2013). Race and racism in Internet studies: A review and critique. *New Media & Society, 15,* 695–719. http://dx.doi.org/10.1177/1461444812462849

Davis, C., Aronson, J., & Salinas, M. (2006). Shades of threat: Racial identity as a moderator of stereotype threat. *Journal of Black Psychology, 32,* 399-417.

Davis, D. E., DeBlaere, C., Hook, J. N., Burnette, J., Van Tongeren, D. R., Rice, K. G., & Worthington, E. L. Jr. (2015). Intergroup forgiveness of race-related offenses. *Journal of Counseling Psychology, 62*, 402-412.

Davis, D. E., Ho, M. Y., Griffin, B. J., Bell, C., Hook, J. N., Van Tongeren, D. R., . . . Westbrook, C. J. (2015). Forgiving the self and physical and mental health correlates: A meta-analytic review. *Journal of Counseling Psychology, 62,* 329–335. http://dx.doi.org/10.1037/cou0000063

Dorn, K., Hook, J. N., Davis, D. E., Van Tongeren, D. R., & Worthington Jr, E. L. (2014). Behavioral methods of assessing forgiveness. *The Journal of Positive Psychology, 9*, 75-80.

Downey, G., & Feldman, S. (1996). Implications of rejection sensitivity for intimate relationships. *Journal of Personality and Social Psychology, 70,* 1327–1343.

Downey, G., Khouri, H., & Feldman, S. (1997). Early interpersonal trauma and adult adjustment: The mediational role of rejection sensitivity. In D. Cicchetti & S. Toth (Eds.), *Rochester symposium in developmental psychopathology: Volume VIII. The effects of trauma on the develop- mental processes* (pp. 85–114). Rochester, NY: University of Rochester Press.

Edwards, L., Kontostathis, A., & Fisher, C. (2016). Cyberbullying, race/ethnicity and mental health outcomes. A review of the literature. *Media and Communication, 4,* 71-79.

Exline, J. J., Worthington, E. L., Jr., Hill, P., & McCullough, M. E. (2003). Forgiveness and justice: A research agenda for social and personality psychology. *Personality and Social Psychology Review, 7*, 337–348. http://dx.doi.org/10.1207/S15327957PSPR0704_06

Federal Bureau of Investigation. (2013). 2013 hate crime statistics. Retrieved from https://www.fbi.gov/about-us/cjis/ucr/hate-crime/2013/topic-pages/incidents-and-offenses/incidentsandoffenses_final

Fehr, R., Gelfand, M. J., & Nag, M. (2010). The road to forgiveness: a meta-analytic synthesis of its situational and dispositional correlates. *Psychological bulletin*, *136*, 894-914.

Freedman, S. & Zarifkar, T. (2016). The psychology of interpersonal forgiveness and guidelines for forgiveness therapy: What therapists need to know to help their clients forgive. *Spirituality in Clinical Practice, 3,* 45-58. http://dx.doi.org/10.1037/scp0000087

Forsyth, J., & Carter, R. T. (2012). The relationship between racial identity status attitudes, racism-related coping, and mental health among Black Americans. *Cultural Diversity and Ethnic Minority Psychology, 18,* 128–140. http://dx.doi.org/10.1037/a0027660

Glaser, J., & Kahn, K. (2005). Prejudice, discrimination, and the Internet. In Y. Amichai-Hamburger (Ed.), *The social net: Understanding human behavior in cyberspace* (pp. 247–274). Oxford, England: Oxford University Press.

Harrison, C., Tayman, K., Janson, N., & Connolly, C. (2010). Stereotypes of Black male athletes on the Internet. *Journal for the Study of Sports and Athletes in Education, 4,* 155–172. http://dx.doi.org/10.1179/ssa .2010.4.2.155

Henson, J., Derlega, V., & Pearson, M. (2013). African American students' responses to racial discrimination: How race-based rejection sensitivity and social constraints are related to psychological reactions. *Journal of Social and Clinical Psychology, 32,* 504-529.

Hill, P. L., & Allemand, M. (2010). Forgivingness and adult patterns of individual differences in environmental mastery and personal growth. *Journal of Research in Personality*, *44*, 245–250. doi:10.1016/j.jrp.2010.01.006

Hughey, M. & Daniels, J. (2013). Racist comments at online news sites: A methodological dilemma for discourse analysis. *Media Culture & Society, 35,* 332–347. http://dx.doi.org/10.1177/0163443712472089

Jones, J. (1997) Prejudice and racism (2nd ed.) Washington, D.C: McGraw-Hill.

Karremans, J., & Van Lange, P. (2008). Forgiveness in personal relationships: Its malleability and powerful consequences. *European Review of Social Psychology, 19,* 202-241.

Khaylis, A., Waelde, L., & Brice, E. (2007). The role of ethnic identity in the relationship of race-related stress to PTSD symptoms among young adults. *Journal of Trauma and Dissociation, 8*, 91–105.

Klonoff, E., & Landrine, H. (1999). Cross-validation of the schedule of racist events. *Journal of Black Psychology*, *25*, 231-254.

Leach, M. M., Baker, A., & Zeigler-Hill, V. (2011). The influence of Black racial identity on the forgiveness of Whites. *Journal of Black Psychology, 37*, 185–209.

Lee, C., Ayers, S., & Kronenfeld, J. (2009). The association between perceived provider discrimination, health care utilization, and health status in racial and ethnic minorities. *Ethnicity & Disease, 19*, 330-337.

Loo, C. M., Fairbank, J. A., Scurfield, R. M., Ruch, L. O., King, D. W., Adams L. J., et al., (2001). Measuring exposure of racism: Development and validation of a race-related stressor scale (RRSS) on Asian American Vietnam Veterans. *Psychological Assessment, 13,* 503-520.

Mossakowski, K. (2003). Coping with perceived discrimination: Does ethnic identity protect mental health? *Journal of Health and Social Behavior, 44,* 318–331

Neblett, E. W., Rivas-Drake, D., & Umaña-Taylor, A. J. (2012). The promise of racial and ethnic protective factors in promoting ethnic minority youth development. *Child Development Perspectives, 6*, 295-303. doi:10.1111/j.1750-8606.2012.00239.x

Odom, E. & Vernon-Vargas, L. (2010). Buffers of racial discrimination: Links with depression among rural African American mothers. *Journal of Marriage and Family, 72,* 346-359. doi:10.1111/j.1741-3737.2010.00704.x

Oney, C.N., Elizabeth, E.R., & Sellers, R.M. (2011). Racial identity and gender as moderators of the relationship between body image and self-esteem for African Americans. *Sex Roles: A Journal of Research, 65,* 619-631.

Pascoe, E., & Richman, L. (2009). Perceived discrimination and health: A meta-analytic review. *Psychology Bulletin, 135*, 531-554. doi: 10.1037/a0016059

Pieterse, A. L., Todd, N. R., Neville, H. A., & Carter, R. T. (2012). Perceived racism and mental health among Black American adults: A meta-analytic review. *Journal of Counseling Psychology, 59*, 1–9.

Phinney, J. S. (1992). The multigroup ethnic identity measure: A new scale for use with diverse groups. *Journal of Adolescent Research*, *7*, 156-176.

Potok, M. (2015, Spring). The year in hate & extremism, 2015. *Intelligence Report*. Retrieved from https://www.splcenter.org/fighting-hate/intelligence-report/2015/year-hate-and-extremism-0

Powell, W., Banks, K., & Mattis, J. (2016). Buried hatchets, marked locations: Forgiveness, everyday racial discrimination, and African American men's depressive symptomatology. *American Journal of Orthopsychiatry.* Advance online publication. http://dx.doi.org/10.1037/ort0000210

Racism No Way. (n.d.). Retrieved October 15, 2015, from http://www.racismnoway.com.au/about-racism/cyber-racism/index.html

Salomon, K., & Jagusztyn, N. (2008). Resting cardiovascular levels and reactivity to interpersonal incivility among Black, Latina/o, and White individuals: The moderating role of ethnic discrimination. *Health Psychology, 27*, 473–481.

Schlomer, G., Bauman, S., & Card, N. (2010). Best practives for missing data management in counseling psychology. *Journal of Counseling Psychology, 57,* 1-10.

Schoulte, J., Schultz, J., & Altmaier, E. (2011). Forgiveness in response to cultural microaggressions. *Counseling Psychology Quarterly, 24,* 291-300.

Sellers, R.M., Copeland-Linder, N., Martin, P., Lewis, R. (2006). Racial identity matters: The relationship between racial discrimination and psychological functioning in African American adolescents. *Journal of Research on Adolescence, 16,* 187-216. http://dx.doi.org/10.1111/j .1532-7795.2006.00128.x

Sellers, R. M., Caldwell, C. H., Schmeelk-Cone, K. H., & Zimmerman, M. A. (2003). Racial identity, racial discrimination, perceived stress and psychological distress among African American young adults. *Journal of Health and Social Behavior, 43,* 302–317.

Solórzano, D., Ceja, M., & Yosso, T. (2000, Winter). Critical race theory, racial microaggressions, and campus racial climate: The experiences of African American college students. *Journal of Negro Education, 69*, 60-73.

Suler, J. (2004). The online disinhibition effect. *CyberPsychology & Behavior, 7,* 321–326. http://dx.doi.org/10.1089/1094931041291295

Tajfel, H., & Turner, J. C. (1986). The social identity theory of intergroup behavior. In S. Worchel & W. Austin (Eds.), *Psychology of intergroup relations* (pp. 7–24). Chicago: Nelson-Hall.

Toussaint, L. L., Williams, D. R., Musick, M. A., & Everson-Rose, S. A. (2008a). The association of forgiveness and 12-month prevalence of major depressive episode: Gender differences in a probability sample of US adults. *Mental Health, Religion & Culture, 11,* 485–500. http://dx .doi.org/10.1080/13674670701564989

Tse, W. S., & Yip, T. H. J. (2009). Relationship among dispositional forgiveness of others, interpersonal adjustment and psychological well- being: Implication for interpersonal theory of depression. *Personality and Individual Differences, 46,* 365–368. http://dx.doi.org/10.1016/j .paid.2008.11.001

Tynes, B., Umaña-Taylor, A., Rose, C., Lin, J., & Anderson, C. (2012). Online racial discrimination and the protective function of ethnic identity and self-esteem for African American adolescents. *Developmental Psychology, 48,* 343-355.

Tynes, B., Giang, M., Williams, D., & Thompson, G. (2008). Online racial discrimination and psychological adjustment among adolescents. *The Journal of Adolescent Health, 43,* 565–569. http://dx.doi .org/10.1016/j.jadohealth.2008.08.021

Tynes, B., Reynolds, L., & Greenfield, P. M. (2004). Adolescence, race, and ethnicity on the Internet: A comparison of discourse in monitored vs. unmonitored chat rooms. *Journal of Applied Developmental Psychology, 25,* 667–684. http://dx.doi.org/10.1016/j.appdev.2004.09.003

Umaña-Taylor, A., Tynes, B., Toomey, R., & Williams, D. (2015). Latino adolescents' perceived discrimination in online and offline settings: An examination of cultural risk and protective factors. *Developmental Psychology, 51,* 87-100.

Utsey, S.O. (1999). Development and validation of a short form of the Index of Race-Related Stress (IRRS)—Brief Version, *Measurement and Evaluation in Counseling and Development, 3*, 149-167.

Utsey, S., Giesbrecht, N., Hook, J., & Stanard, P. (2008). Cultural, sociofamilial, and psychological resources that inhibit psychological distress in African Americans exposed to stressful life events and race-related stress. *Journal of Counseling Psychology, 55*, 49-62.

Williams, D. & Mohammed, S. (2009). Discrimination and racial disparities in health: Evidence and needed research. *Journal of Behavioral Medicine, 32*, 2-38.

Wink, P., Dillon, M., & Larsen, B. (2005). Religion as moderator of the depression-health connection: Findings from a longitudinal study. *Research on Aging, 27*, 197–220.

APPENDICES

Appendix A: Informed Consent

Georgia State University
Department of Counseling and Psychological Services
Informed Consent

Title: Perceptions of Racism and Race-Based Traumatic Stress: The Moderating Effects of Cyberracism, Racial/Ethnic Identity, and Forgiveness

Principal Investigator: Don E. Davis, Ph.D.
Student Principal Investigator: Terrence A. Jordan II, M.S., M.A.

I. Purpose :
You are invited to participate in a research study. The purpose of this study is to examine whether or not social media, racial identity, and forgiveness exacerbate or buffers the relationship between racial discrimination and traumatic stress reactions. A total of 500 participants will be recruited for this study. Participation will require 60 minutes of your time.

II. Procedures:
To participate in this study, you must be at least 18 years old, live in the United States, and identify as African American/Black. If you decide to participate, you will complete an online survey. Participants will be gathered through Amazon's Mechanical Turk. You complete several measures regarding your experiences of racism as well as how you have coped with these experiences. Finally, you will complete a few measures describing your personality. Your participation in this study will take approximately 20 minutes of your time. You will receive 50 cents for participation in this study.

III. Risks:
You may experience some discomfort while completing some items. Risk is deemed to be low, because you can stop participation at anytime. Participants can contact the PI if they want to discuss the survey.

IV. Benefits:
There are no expected benefits to participants. Findings from this study will increase knowledge regarding how people cope with race-related transgressions.

V. Voluntary Participation and Withdrawal:
Participation in research is voluntary. You do not have to be in this study. If you decide to be in the study and change your mind, you have the right to drop out at any time. If you do not want to answer a question, skip it. If you complete the survey, even if you skip some questions, you will be granted 50 cents through your Amazon account.

VI. Confidentiality:

We will keep your records private to the extent allowed by law. Dr. Davis and an approved research team will have access to the information you provide. We will grant pay using a unique identifier that you provide through MTurk, so we are not requesting any identifying information that will directly link you to the survey. Information may also be shared with those who make sure the study is done correctly, such as the GSU Institutional Review Board and the Office for Human Research Protection (OHRP). The information you provide will be stored on firewall-protected computers. Any facts that might point to you will not appear when we present this study or publish its results. The findings will be summarized and reported in group form. You will not be identified personally.

VII. Contact Persons:

Contact Don Davis at ddavis88@gsu.edu or 804-335-5173 if you have questions about this study. You can also call if think you have been harmed by the study. Call Susan Vogtner in the Georgia State University Office of Research Integrity at 404-413-3513 or svogtner1@gsu.edu if you want to talk to someone who is not part of the study team. You can talk about questions, concerns, or suggestions about the study. You can also call Susan Vogtner if you have questions or concerns about your rights in this study.

VIII. Copy of Consent Form to Subject:

Please print a copy of this consent form to keep.

If you are willing to volunteer for this research, please click "I agree" below. (You must indicate consent in order to go on to the next page.)

I agree to participate in this study.

Appendix B: Demographic Survey

1. What is your gender?
    - Male
    - Female
    - Transgender
    - Other

2. What is your age?

3. What is your race?
    - African American/Black
    - European American/White
    - Latino/a
    - Asian/Asian American/Pacific Islander
    - American Indian
    - Biracial
    - Other (Specify)

4. What is your ethnicity? (e.g., American, Japanese)

5. What is your nationality/country of origin?

6. If born outside of the United States, how many years have you lived here?

7. What is your current relationship status?
    - Single
    - Dating
    - Committed Relationship
    - Engaged
    - Married
    - Separated
    - Divorced
    - Widowed

8. Please estimate current income:
    - $0-9,999
    - $10,000-19,999
    - $20,000-29,999
    - $30,000-39,999
    - $40,000-49,999
    - $50,000-59,999
    - $60,000-69,999
    - $70,000-79,999
    - $80,000-89,999
    - $90,000-99,999

- Over $100,000

9. What is your religious/spiritual affiliation?
    - Christian
    - Jewish
    - Muslim
    - Buddhist
    - Hindu
    - Atheist
    - Agnostic
    - Pagan
    - Other (Specify)

10. Highest Grade/Level of Education Completed?
    - Did Not Complete High School
    - High School/GED
    - Some College
    - Bachelor's Degree
    - Master's Degree
    - Advanced Graduate Work

Appendix C: Recruitment Script

Recruiting Materials Posted on Mechanical Turk

Abstract. You will describe several experiences of online racism and complete measures related to those events. The study takes 60 minutes and you will receive 50 cents for being in the study.

Description. To participate in this study, you must be at least 18 years old, live in the United States, and identify as African American/Black. If you decide to participate, you will complete an online survey. Participants will be gathered through Amazon's Mechanical Turk. You complete several measures regarding your experiences of racism, as well as how you coped with these experiences. Finally, you will complete a few measures describing your sense of identity. Your participation in this study will take approximately 60 minutes of your time. You will receive 50 cents for participation in this study.

Appendix D: Questionnaire

We are interested in your experiences with racism. As you answer the questions below, please think about your ENTIRE LIFE, from when you were a child to the present. For each question, please indicate the number that best captures the things that have happened to you. Answer each question TWICE, once for what has happened to you IN THE PAST YEAR, and once for what YOUR ENTIRE LIFE HAS BEEN LIKE. Use these numbers:

1 = If this has NEVER happened to you
2 = If this has happened ONCE IN A WHILE (less than 10% of the time)
3 = If this has happened SOMETIMES (10%-25% of the time)
4 = If this has happened A LOT (26%-49% of the time)
5 = If this has happened MOST OF THE TIME (50%-70% of the time)
6 = If this has happened ALMOST ALL OF THE TIME (more than 70% of the time)

1. How many times have you been treated unfairly by teachers or professors because you are Black?

a. How many times IN YOUR ENTIRE LIFE? 1 2 3 4 5 6
b. How many times IN THE PAST YEAR? 1 2 3 4 5 6

Not at all Extremely

c. How stressful was this for you? 1 2 3 4 5 6

2. How many times have you been treated unfairly by your employer, boss, or supervisors because you are Black?

a. How many times IN YOUR ENTIRE LIFE? 1 2 3 4 5 6
b. How many times IN THE PAST YEAR? 1 2 3 4 5 6

Not at all Extremely

c. How stressful was this for you? 1 2 3 4 5 6

3. How many times have you been treated unfairly by your co-workers, fellow students or colleagues because you are Black?

a. How many times IN YOUR ENTIRE LIFE? 1 2 3 4 5 6
b. How many times IN THE PAST YEAR? 1 2 3 4 5 6

Not at all Extremely

c. How stressful was this for you? 1 2 3 4 5 6

4. How many times have you been treated unfairly by people in service jobs (by store clerks, waiters, bartenders, waitresses, bank tellers, mechanics, and others) because you are Black?

a. How many times IN YOUR ENTIRE LIFE? 1 2 3 4 5 6
b. How many times IN THE PAST YEAR? 1 2 3 4 5 6
Not at all Extremely
c. How stressful was this for you? 1 2 3 4 5 6

5. How many times have you been treated unfairly by strangers because you are Black?

a. How many times IN YOUR ENTIRE LIFE? 1 2 3 4 5 6
b. How many times IN THE PAST YEAR? 1 2 3 4 5 6
Not at all Extremely
c. How stressful was this for you? 1 2 3 4 5 6

6. How many times have you been treated unfairly by people in helping jobs (by doctors, nurses, psychiatrists, case workers, dentists, school counselors, therapists, pediatricians, school principals, gynecologists, and others) because you are Black?

a. How many times IN YOUR ENTIRE LIFE? 1 2 3 4 5 6
b. How many times IN THE PAST YEAR? 1 2 3 4 5 6
Not at all Extremely
c. How stressful was this for you? 1 2 3 4 5 6

7. How many times have you been treated unfairly by neighbors because you are Black?

a. How many times IN YOUR ENTIRE LIFE? 1 2 3 4 5 6
b. How many times IN THE PAST YEAR? 1 2 3 4 5 6
Not at all Extremely
c. How stressful was this for you? 1 2 3 4 5 6

8. How many times have you been treated unfairly by institutions (schools, universities, law firms, the police, the courts, the Department of Social Services, the Unemployment Office and others) because you are Black?

a. How many times IN YOUR ENTIRE LIFE? 1 2 3 4 5 6
b. How many times IN THE PAST YEAR? 1 2 3 4 5 6
Not at all Extremely
c. How stressful was this for you? 1 2 3 4 5 6

9. How many times have you been treated unfairly by people you thought were your friends because you are Black?

a. How many times IN YOUR ENTIRE LIFE? 1 2 3 4 5 6
b. How many times IN THE PAST YEAR? 1 2 3 4 5 6
Not at all Extremely

c. How stressful was this for you? 1 2 3 4 5 6

10. How many times have you been accused or suspected of doing something wrong (such as stealing, cheating, not doing your share of the work, or breaking the law) because you are Black?

a. How many times IN YOUR ENTIRE LIFE? 1 2 3 4 5 6
b. How many times IN THE PAST YEAR? 1 2 3 4 5 6
Not at all Extremely
c. How stressful was this for you? 1 2 3 4 5 6

11. How many times have people misunderstood your intentions and motives because you are Black?

a. How many times IN YOUR ENTIRE LIFE? 1 2 3 4 5 6
b. How many times IN THE PAST YEAR? 1 2 3 4 5 6
Not at all Extremely
c. How stressful was this for you? 1 2 3 4 5 6

12. How many times have you wanted to tell someone off for being racist but didn‘t say anything?

a. How many times IN YOUR ENTIRE LIFE? 1 2 3 4 5 6
b. How many times IN THE PAST YEAR? 1 2 3 4 5 6
Not at all Extremely
c. How stressful was this for you? 1 2 3 4 5 6

13. How many times have you been really angry about something racist that was done to you?

a. How many times IN YOUR ENTIRE LIFE? 1 2 3 4 5 6
b. How many times IN THE PAST YEAR? 1 2 3 4 5 6
Not at all Extremely
c. How stressful was this for you? 1 2 3 4 5 6

14. How many times were you forced to take drastic steps (such as filing a grievance, filing a lawsuit, quitting your job, moving away, and other actions) to deal with some racist thing that was done to you?

a. How many times IN YOUR ENTIRE LIFE? 1 2 3 4 5 6
b. How many times IN THE PAST YEAR? 1 2 3 4 5 6
Not at all Extremely
c. How stressful was this for you? 1 2 3 4 5 6

15. How many times have you been called a racist name like n___, coon, jungle bunny, or other names?

a. How many times IN YOUR ENTIRE LIFE? 1 2 3 4 5 6
b. How many times IN THE PAST YEAR? 1 2 3 4 5 6
Not at all Extremely
c. How stressful was this for you? 1 2 3 4 5 6

16. How many times have you gotten into an argument or a fight about something racist that was done to you or done to somebody else?

a. How many times IN YOUR ENTIRE LIFE? 1 2 3 4 5 6
b. How many times IN THE PAST YEAR? 1 2 3 4 5 6
c. How stressful was this for you? 1 2 3 4 5 6

17. How many times have you been made fun of, picked on, pushed, shoved, hit, or threatened with harm because you are Black?

a. How many times IN YOUR ENTIRE LIFE? 1 2 3 4 5 6
b. How many times IN THE PAST YEAR? 1 2 3 4 5 6
Not at all Extremely
c. How stressful was this for you? 1 2 3 4 5 6

18. How different would your life have been now if you HAD NOT BEEN treated in a racist and unfair way?

A. THROUGHOUT YOUR ENTIRE LIFE:

1	2	3	4	5	6
Same as now	Little different	Different in many ways	Different in a lot of ways	Different in most ways	Totally different

B. IN THE PAST YEAR:

1	2	3	4	5	6
Same as now	Little different	Different in many ways	Different in a lot of ways	Different in most ways	Totally different

Directions: This survey questionnaire is intended to examine online social activities that result in offensive content and comments in relation to a person's race/ethnicity. Some events happen just once, some more often, while others happen frequently. Below you will find listed some of these experiences, for which you are to indicate those that have happened.

Please select the number on the scale (1 to 6) that indicates the frequency of the event. Responses range from 1 = I have never experienced this event to 6 = I experience this event several times per day. If an event did not happen, circle or select 1 and go to the next item. Do not leave any items blank.

If you have experienced an event, rate (1 to 6) on how upsetting the event was for you. Responses range from 1 = not at all upset to 6 = extremely upset.

1. I viewed racial content that was intended to be a joke.
2. I saw racist jokes.
3. I came across racist memes that made fun of my race/ethnicity.
4. Someone made stereotypical comments about my race/ethnicity.
5. I encountered stereotypical language on message boards/comment sections of news articles.
6. I read things that made me fear for my safety.
7. I saw things that made me feel afraid for my safety.
8. I read things that made me fear for the safety of my loved ones.
9. I wanted to punch something after seeing racially insensitive content.
10. I felt like throwing something after seeing racially insensitive content.
11. I felt like yelling at someone after viewing racial content.
12. I felt furious after viewing racial content.
13. I muted racial words or topics so that I never have to engage with them.
14. I have rules in place to help me navigate negative situations online.
15. I have strongly considered not using social media in order to avoid racial negativity.

In the lines below, please list and briefly describe up to three of the most memorable events of racism you have experienced in your life, the setting where the event(s) occurred (e.g., school, work, store), the location of where the event(s) occurred (e.g., city, state, or country), and when in your life the event took place (e.g., childhood, adolescence, adulthood, later adulthood). *Please DO NOT provide any names of specific details that could be used to identify yourself or another person.*

Event #1: _____

_____

Setting: _____

Location (City/State): _____

Period of Life: _____

Event #2: _____

_____

Setting: _____

Location (City/State): _____

Period of Life: _____

Event #3: _____

_____

Setting: _____

Location (City/State): _____

Period of Life: _____

OF THE EVENTS DESCRIBED ABOVE,
PLEASE CIRCLE THE ONE
MOST MEMORABLE EXPERIENCE
AND USE IT TO ANSWER THE REMAINING QUESTIONS.

How often has this type of event occurred? (Circle/Select One)

Please check the box next to each period in your life when you experienced the event.

		(3-12 yrs)	(13-18 yrs)	(19-60 yrs)	(61+ yrs)
a.	Only ONE time:	in □ childhood,	□ adolescence,	□ adulthood,	□ later adulthood.
b.	A FEW (3-4) times:	in □ childhood,	□ adolescence,	□ adulthood,	□ later adulthood.
c.	Several (5-6) times:	in □ childhood,	□ adolescence,	□ adulthood,	□ later adulthood.
d.	ALL the time:	in □ childhood,	□ adolescence,	□ adulthood,	□ later adulthood.

Did you find that this event was out of your control? □ Yes □ No

Did you find that this event was unexpected? □ Yes □ No

Did you find this event to be emotionally painful (a negative experience)? □ Yes □ No

Type of Event

For the event that you selected as your most memorable, please check ONE option below that best describes or is most similar to the type of event that you experienced.

___ You were called a name, like a racial slur, or were subject to a racial joke.

___ You were denied access or service to a restaurant, store, or college (e.g., ignored, made to wait, or not allowed in).

___ Your experience occurred at work (e.g., with a boss, supervisor, coworker).

___ You were made to feel you violated a racial rule (e.g., cross-racial dating) or did not belong.

___ You were profiled (e.g., being followed in a store, suspected or accused of theft, or stopped or searched by police).

___ You were treated on the basis of a stereotype (e.g., had your abilities or qualifications questioned).

___ You were physically assaulted or threatened in some manner (e.g., hit, beaten, spat on).

___ You experienced hostility from someone of your own race due to your skin color, looks, speech, or behavior.

___ Your experience included two or more of the categories above.

___ Other (please describe) _____
_____

Using the <u>ONE</u> experience you described and circled above, respond to the following reactions. Read each reaction carefully and circle the number that best describes your reactions or feeling *Right After the Event (within one month)* and then, the best description of your reactions or feelings *More Recently* when you think about, speak about, or are reminded of the event. In the third column, please circle/select whether or not (Y/N) *Others (i.e., friends, family, or coworkers) Noticed a Change* in your behavior or personality following the event.

1. As a consequence of the memorable encounter I had with racism, I felt that I had nothing to look forward to.

Right After Event (Circle One)

Does not describe my reactions	Had this reaction infrequently	Had this reaction sometimes	Had this reaction frequently	This reaction would not go away
0	1	2	3	4

More Recently (Circle One)

Does not describe my reactions	Had this reaction infrequently	Had this reaction sometimes	Had this reaction frequently	This reaction would not go away
0	1	2	3	4

Did others notice a change in you? (Circle/Select one) □ Yes □ No

2. As a consequence of the memorable encounter I had with racism, I found myself getting upset rather easily.

Right After Event (Circle One)

Does not describe my reactions	Had this reaction infrequently	Had this reaction sometimes	Had this reaction frequently	This reaction would not go away
0	1	2	3	4

More Recently (Circle One)

Does not describe my reactions	Had this reaction infrequently	Had this reaction sometimes	Had this reaction frequently	This reaction would not go away
0	1	2	3	4

Did others notice a change in you? (Circle/Select one) □ Yes □ No

3. As a consequence of the memorable encounter I had with racism, I was in a state of nervous tension.

Right After Event (Circle One)

Does not describe my reactions	Had this reaction infrequently	Had this reaction sometimes	Had this reaction frequently	This reaction would not go away
0	1	2	3	4

More Recently (Circle One)

Does not describe my reactions	Had this reaction infrequently	Had this reaction sometimes	Had this reaction frequently	This reaction would not go away
0	1	2	3	4

Did others notice a change in you? (Circle/Select one) □ Yes □ No

4. As a consequence of the memorable encounter I had with racism, I experience more headaches and stomach aches since the event. *Right After Event (Circle One)*

Does not describe my reactions	Had this reaction infrequently	Had this reaction sometimes	Had this reaction frequently	This reaction would not go away
0	1	2	3	4

More Recently (Circle One)

Does not describe my reactions	Had this reaction infrequently	Had this reaction sometimes	Had this reaction frequently	This reaction would not go away
0	1	2	3	4

Did others notice a change in you? (Circle/Select one) □ Yes □ No

5. As a consequence of the memorable encounter I had with racism, I find myself spending a lot of time at home and away from family or friends.

Right After Event (Circle One)

Does not describe my reactions	Had this reaction infrequently	Had this reaction sometimes	Had this reaction frequently	This reaction would not go away
0	1	2	3	4

More Recently (Circle One)

Does not describe my reactions	Had this reaction infrequently	Had this reaction sometimes	Had this reaction frequently	This reaction would not go away
0	1	2	3	4

Did others notice a change in you? (Circle/Select one) □ Yes □ No

6. As a consequence of the memorable encounter I had with racism, I experience trouble falling or staying asleep.

Right After Event (Circle One)

Does not describe my reactions	Had this reaction infrequently	Had this reaction sometimes	Had this reaction frequently	This reaction would not go away
0	1	2	3	4

More Recently (Circle One)

Does not describe my reactions	Had this reaction infrequently	Had this reaction sometimes	Had this reaction frequently	This reaction would not go away
0	1	2	3	4

Did others notice a change in you? (Circle/Select one) □ Yes □ No

7. As a consequence of the memorable encounter I had with racism, I feel as though my heart is beating hard and fast, as if it might pop out of my chest.

Right After Event (Circle One)

Does not describe my reactions	Had this reaction infrequently	Had this reaction sometimes	Had this reaction frequently	This reaction would not go away
0	1	2	3	4

More Recently (Circle One)

Does not describe my reactions	Had this reaction infrequently	Had this reaction sometimes	Had this reaction frequently	This reaction would not go away
0	1	2	3	4

Did others notice a change in you? (Circle/Select one) □ Yes □ No

8. As a consequence of my most memorable encounter with racism, I feel a lack of initiative or a lessened desire to succeed since the event.

Right After Event (Circle One)

Does not describe my reactions	Had this reaction infrequently	Had this reaction sometimes	Had this reaction frequently	This reaction would not go away
0	1	2	3	4

More Recently (Circle One)

Does not describe my reactions	Had this reaction infrequently	Had this reaction sometimes	Had this reaction frequently	This reaction would not go away
0	1	2	3	4

Did others notice a change in you? (Circle/Select one) □ Yes □ No

9. As a consequence of the memorable encounter I had with racism, I felt that life was meaningless.

Right After Event (Circle One)

Does not describe my reactions	Had this reaction infrequently	Had this reaction sometimes	Had this reaction frequently	This reaction would not go away
0	1	2	3	4

More Recently (Circle One)

Does not describe my reactions	Had this reaction infrequently	Had this reaction sometimes	Had this reaction frequently	This reaction would not go away
0	1	2	3	4

Did others notice a change in you? (Circle/Select one) □ Yes □ No

10. As a consequence of the memorable encounter I had with racism, I experience physical reactions (e.g., heart pounding, trouble breathing, sweating) when something reminds me of the event.

Right After Event (Circle One)

Does not describe my reactions	Had this reaction infrequently	Had this reaction sometimes	Had this reaction frequently	This reaction would not go away
0	1	2	3	4

More Recently (Circle One)

Does not describe my reactions	Had this reaction infrequently	Had this reaction sometimes	Had this reaction frequently	This reaction would not go away
0	1	2	3	4

Did others notice a change in you? (Circle/Select one) □ Yes □ No

11. As a consequence of the memorable encounter I had with racism, I have used alcohol or other drugs to help me sleep or to make me forget the event.

Right After Event (Circle One)

Does not describe my reactions	Had this reaction infrequently	Had this reaction sometimes	Had this reaction frequently	This reaction would not go away
0	1	2	3	4

More Recently (Circle One)

Does not describe my reactions	Had this reaction infrequently	Had this reaction sometimes	Had this reaction frequently	This reaction would not go away
0	1	2	3	4

Did others notice a change in you? (Circle/Select one) □ Yes □ No

12. As a consequence of the memorable encounter I had with racism, I feel distressed and frustrated about things that used to not bother me.

Right After Event (Circle One)

Does not describe my reactions	Had this reaction infrequently	Had this reaction sometimes	Had this reaction frequently	This reaction would not go away
0	1	2	3	4

More Recently (Circle One)

Does not describe my reactions	Had this reaction infrequently	Had this reaction sometimes	Had this reaction frequently	This reaction would not go away
0	1	2	3	4

Did others notice a change in you? (Circle/Select one) □ Yes □ No

13. As a consequence of the memorable encounter I had with racism, I tended to over-react to situations.

Right After Event (Circle One)

Does not describe my reactions	Had this reaction infrequently	Had this reaction sometimes	Had this reaction frequently	This reaction would not go away
0	1	2	3	4

More Recently (Circle One)

Does not describe my reactions	Had this reaction infrequently	Had this reaction sometimes	Had this reaction frequently	This reaction would not go away
0	1	2	3	4

Did others notice a change in you? (Circle/Select one) □ Yes □ No

14. As a consequence of the memorable encounter I had with racism, I often find myself denying that the event occurred.

Right After Event (Circle One)

Does not describe my reactions	Had this reaction infrequently	Had this reaction sometimes	Had this reaction frequently	This reaction would not go away
0	1	2	3	4

More Recently (Circle One)

Does not describe my reactions	Had this reaction infrequently	Had this reaction sometimes	Had this reaction frequently	This reaction would not go away
0	1	2	3	4

Did others notice a change in you? (Circle/Select one) □ Yes □ No

15. As a consequence of my most memorable encounter with racism, I feel a sense of responsibility for the event.

Right After Event (Circle One)

Does not describe my reactions	Had this reaction infrequently	Had this reaction sometimes	Had this reaction frequently	This reaction would not go away
0	1	2	3	4

More Recently (Circle One)

Does not describe my reactions	Had this reaction infrequently	Had this reaction sometimes	Had this reaction frequently	This reaction would not go away
0	1	2	3	4

Did others notice a change in you? (Circle/Select one) □ Yes □ No

16. As a consequence of the memorable encounter I had with racism, I found it hard to calm down after something upset me.

Right After Event (Circle One)

Does not describe my reactions	Had this reaction infrequently	Had this reaction sometimes	Had this reaction frequently	This reaction would not go away
0	1	2	3	4

More Recently (Circle One)

Does not describe my reactions	Had this reaction infrequently	Had this reaction sometimes	Had this reaction frequently	This reaction would not go away
0	1	2	3	4

Did others notice a change in you? (Circle/Select one) □ Yes □ No

17. As a consequence of the memorable encounter I had with racism, I experience tiredness and lack of energy.

Right After Event (Circle One)

Does not describe my reactions	Had this reaction infrequently	Had this reaction sometimes	Had this reaction frequently	This reaction would not go away
0	1	2	3	4

More Recently (Circle One)

Does not describe my reactions	Had this reaction infrequently	Had this reaction sometimes	Had this reaction frequently	This reaction would not go away
0	1	2	3	4

Did others notice a change in you? (Circle/Select one) □ Yes □ No

18. As a consequence of the memorable encounter I had with racism, I experienced trembling (e.g., in the hands).

Right After Event (Circle One)

Does not describe my reactions	Had this reaction infrequently	Had this reaction sometimes	Had this reaction frequently	This reaction would not go away
0	1	2	3	4

More Recently (Circle One)

Does not describe my reactions	Had this reaction infrequently	Had this reaction sometimes	Had this reaction frequently	This reaction would not go away
0	1	2	3	4

Did others notice a change in you? (Circle/Select one) □ Yes □ No

19. As a consequence of the memorable encounter I had with racism, I feel easily intimidated (as if someone is going to hurt you as they walk passed you in the street).

Right After Event (Circle One)

Does not describe my reactions	Had this reaction infrequently	Had this reaction sometimes	Had this reaction frequently	This reaction would not go away
0	1	2	3	4

More Recently (Circle One)

Does not describe my reactions	Had this reaction infrequently	Had this reaction sometimes	Had this reaction frequently	This reaction would not go away
0	1	2	3	4

Did others notice a change in you? (Circle/Select one) □ Yes □ No

20. As a consequence of the memorable encounter I had with racism, I feel emotionally upset when I am reminded of the event.

Right After Event (Circle One)

Does not describe my reactions	Had this reaction infrequently	Had this reaction sometimes	Had this reaction frequently	This reaction would not go away
0	1	2	3	4

More Recently (Circle One)

Does not describe my reactions	Had this reaction infrequently	Had this reaction sometimes	Had this reaction frequently	This reaction would not go away
0	1	2	3	4

Did others notice a change in you? (Circle/Select one) □ Yes □ No

21. As a consequence of the memorable encounter I had with racism, I found it difficult to relax.

Right After Event (Circle One)

Does not describe my reactions	Had this reaction infrequently	Had this reaction sometimes	Had this reaction frequently	This reaction would not go away
0	1	2	3	4

More Recently (Circle One)

Does not describe my reactions	Had this reaction infrequently	Had this reaction sometimes	Had this reaction frequently	This reaction would not go away
0	1	2	3	4

Did others notice a change in you? (Circle/Select one) □ Yes □ No

22. As a consequence of the memorable encounter I had with racism, I just can't believe the event really happened to me.

Right After Event (Circle One)

Does not describe my reactions	Had this reaction infrequently	Had this reaction sometimes	Had this reaction frequently	This reaction would not go away
0	1	2	3	4

More Recently (Circle One)

Does not describe my reactions	Had this reaction infrequently	Had this reaction sometimes	Had this reaction frequently	This reaction would not go away
0	1	2	3	4

Did others notice a change in you? (Circle/Select one) □ Yes □ No

23. As a consequence of my most memorable encounter with racism, at times, I think I am no good at all.

Right After Event (Circle One)

Does not describe my reactions	Had this reaction infrequently	Had this reaction sometimes	Had this reaction frequently	This reaction would not go away
0	1	2	3	4

More Recently (Circle One)

Does not describe my reactions	Had this reaction infrequently	Had this reaction sometimes	Had this reaction frequently	This reaction would not go away
0	1	2	3	4

Did others notice a change in you? (Circle/Select one) □ Yes □ No

24. As a consequence of the memorable encounter I had with racism, I found myself getting agitated.

Right After Event (Circle One)

Does not describe my reactions	Had this reaction infrequently	Had this reaction sometimes	Had this reaction frequently	This reaction would not go away
0	1	2	3	4

More Recently (Circle One)

Does not describe my reactions	Had this reaction infrequently	Had this reaction sometimes	Had this reaction frequently	This reaction would not go away
0	1	2	3	4

Did others notice a change in you? (Circle/Select one) □ Yes □ No

25. As a consequence of the memorable encounter I had with racism, I experience tearfulness.

Right After Event (Circle One)

Does not describe my reactions	Had this reaction infrequently	Had this reaction sometimes	Had this reaction frequently	This reaction would not go away
0	1	2	3	4

More Recently (Circle One)

Does not describe my reactions	Had this reaction infrequently	Had this reaction sometimes	Had this reaction frequently	This reaction would not go away
0	1	2	3	4

Did others notice a change in you? (Circle/Select one) □ Yes □ No

26. As a consequence of the memorable encounter I had with racism, I experience poor appetite.

Right After Event (Circle One)

Does not describe my reactions	Had this reaction infrequently	Had this reaction sometimes	Had this reaction frequently	This reaction would not go away
0	1	2	3	4

More Recently (Circle One)

Does not describe my reactions	Had this reaction infrequently	Had this reaction sometimes	Had this reaction frequently	This reaction would not go away
0	1	2	3	4

Did others notice a change in you? (Circle/Select one) □ Yes □ No

27. As a consequence of the memorable encounter I had with racism, I feel paranoid (for example, when people look at you when you walk into a room).

Right After Event (Circle One)

Does not describe my reactions	Had this reaction infrequently	Had this reaction sometimes	Had this reaction frequently	This reaction would not go away
0	1	2	3	4

More Recently (Circle One)

Does not describe my reactions	Had this reaction infrequently	Had this reaction sometimes	Had this reaction frequently	This reaction would not go away
0	1	2	3	4

Did others notice a change in you? (Circle/Select one) □ Yes □ No

28. As a consequence of the memorable encounter I had with racism, I find myself thinking about what happened even when I don't want to.

Right After Event (Circle One)

Does not describe my reactions	Had this reaction infrequently	Had this reaction sometimes	Had this reaction frequently	This reaction would not go away
0	1	2	3	4

More Recently (Circle One)

Does not describe my reactions	Had this reaction infrequently	Had this reaction sometimes	Had this reaction frequently	This reaction would not go away
0	1	2	3	4

Did others notice a change in you? (Circle/Select one) □ Yes □ No

29. As a consequence of the memorable encounter I had with racism, I felt that I was rather touchy.

Right After Event (Circle One)

Does not describe my reactions	Had this reaction infrequently	Had this reaction sometimes	Had this reaction frequently	This reaction would not go away
0	1	2	3	4

More Recently (Circle One)

Does not describe my reactions	Had this reaction infrequently	Had this reaction sometimes	Had this reaction frequently	This reaction would not go away
0	1	2	3	4

Did others notice a change in you? (Circle/Select one) □ Yes □ No

30. As a consequence of the memorable encounter I had with racism, I feel like I am immune to pain.

Right After Event (Circle One)

Does not describe my reactions	Had this reaction infrequently	Had this reaction sometimes	Had this reaction frequently	This reaction would not go away
0	1	2	3	4

More Recently (Circle One)

Does not describe my reactions	Had this reaction infrequently	Had this reaction sometimes	Had this reaction frequently	This reaction would not go away
0	1	2	3	4

Did others notice a change in you? (Circle/Select one) □ Yes □ No

31. As a consequence of my most memorable encounter with racism, I certainly feel useless at times.

Right After Event (Circle One)

Does not describe my reactions	Had this reaction infrequently	Had this reaction sometimes	Had this reaction frequently	This reaction would not go away
0	1	2	3	4

More Recently (Circle One)

Does not describe my reactions	Had this reaction infrequently	Had this reaction sometimes	Had this reaction frequently	This reaction would not go away
0	1	2	3	4

Did others notice a change in you? (Circle/Select one) □ Yes □ No

32. As a consequence of the memorable encounter I had with racism, I become easily pissed-off (as if you can't control your temper during an otherwise normal conversation).

Right After Event (Circle One)

Does not describe my reactions	Had this reaction infrequently	Had this reaction sometimes	Had this reaction frequently	This reaction would not go away
0	1	2	3	4

More Recently (Circle One)

Does not describe my reactions	Had this reaction infrequently	Had this reaction sometimes	Had this reaction frequently	This reaction would not go away
0	1	2	3	4

Did others notice a change in you? (Circle/Select one) □ Yes □ No

33. As a consequence of the memorable encounter I had with racism, I found it difficult to work up the initiative to do things.

Right After Event (Circle One)

Does not describe my reactions	Had this reaction infrequently	Had this reaction sometimes	Had this reaction frequently	This reaction would not go away
0	1	2	3	4

More Recently (Circle One)

Does not describe my reactions	Had this reaction infrequently	Had this reaction sometimes	Had this reaction frequently	This reaction would not go away
0	1	2	3	4

Did others notice a change in you? (Circle/Select one) □ Yes □ No

34. As a consequence of the memorable encounter I had with racism, I was aware of dryness of my mouth.

Right After Event (Circle One)

Does not describe my reactions	Had this reaction infrequently	Had this reaction sometimes	Had this reaction frequently	This reaction would not go away
0	1	2	3	4

More Recently (Circle One)

Does not describe my reactions	Had this reaction infrequently	Had this reaction sometimes	Had this reaction frequently	This reaction would not go away
0	1	2	3	4

Did others notice a change in you? (Circle/Select one) □ Yes □ No

35. As a consequence of the memorable encounter I had with racism, I feel hyperactive all the time (for example, feel like you can’t relax).

Right After Event (Circle One)

Does not describe my reactions	Had this reaction infrequently	Had this reaction sometimes	Had this reaction frequently	This reaction would not go away
0	1	2	3	4

More Recently (Circle One)

Does not describe my reactions	Had this reaction infrequently	Had this reaction sometimes	Had this reaction frequently	This reaction would not go away
0	1	2	3	4

Did others notice a change in you? (Circle/Select one) □ Yes □ No

36. As a consequence of the memorable encounter I had with racism, I experience mental images of the event.

Right After Event (Circle One)

Does not describe my reactions	Had this reaction infrequently	Had this reaction sometimes	Had this reaction frequently	This reaction would not go away
0	1	2	3	4

More Recently (Circle One)

Does not describe my reactions	Had this reaction infrequently	Had this reaction sometimes	Had this reaction frequently	This reaction would not go away
0	1	2	3	4

Did others notice a change in you? (Circle/Select one) □ Yes □ No

37. As a consequence of the memorable encounter I had with racism, I was worried about situations in which I might panic and make a fool of myself.

Right After Event (Circle One)

Does not describe my reactions	Had this reaction infrequently	Had this reaction sometimes	Had this reaction frequently	This reaction would not go away
0	1	2	3	4

More Recently (Circle One)

Does not describe my reactions	Had this reaction infrequently	Had this reaction sometimes	Had this reaction frequently	This reaction would not go away
0	1	2	3	4

Did others notice a change in you? (Circle/Select one) □ Yes □ No

38. As a consequence of the memorable encounter I had with racism, when I describe the event, I feel nothing, as if I'm not "really there."

Right After Event (Circle One)

Does not describe my reactions	Had this reaction infrequently	Had this reaction sometimes	Had this reaction frequently	This reaction would not go away
0	1	2	3	4

More Recently (Circle One)

Does not describe my reactions	Had this reaction infrequently	Had this reaction sometimes	Had this reaction frequently	This reaction would not go away
0	1	2	3	4

Did others notice a change in you? (Circle/Select one) □ Yes □ No

39. As a consequence of my most memorable encounter with racism, I wish I could have more respect for myself.

Right After Event (Circle One)

Does not describe my reactions	Had this reaction infrequently	Had this reaction sometimes	Had this reaction frequently	This reaction would not go away
0	1	2	3	4

More Recently (Circle One)

Does not describe my reactions	Had this reaction infrequently	Had this reaction sometimes	Had this reaction frequently	This reaction would not go away
0	1	2	3	4

Did others notice a change in you? (Circle/Select one) □ Yes □ No

40. As a consequence of the memorable encounter I had with racism, I become easily upset or defensive (for example, when receiving feedback from a peer about a paper you wrote).

Right After Event (Circle One)

Does not describe my reactions	Had this reaction infrequently	Had this reaction sometimes	Had this reaction frequently	This reaction would not go away
0	1	2	3	4

More Recently (Circle One)

Does not describe my reactions	Had this reaction infrequently	Had this reaction sometimes	Had this reaction frequently	This reaction would not go away
0	1	2	3	4

Did others notice a change in you? (Circle/Select one) □ Yes □ No

41. As a consequence of the memorable encounter I had with racism, I couldn't seem to experience any positive feelings at all.

Right After Event (Circle One)

Does not describe my reactions	Had this reaction infrequently	Had this reaction sometimes	Had this reaction frequently	This reaction would not go away
0	1	2	3	4

More Recently (Circle One)

Does not describe my reactions	Had this reaction infrequently	Had this reaction sometimes	Had this reaction frequently	This reaction would not go away
0	1	2	3	4

Did others notice a change in you? (Circle/Select one) □ Yes □ No

42. As a consequence of the memorable encounter I had with racism, I was ware of the action of my heart in the absence of physical exertion (e.g., racing heart).

Right After Event (Circle One)

Does not describe my reactions	Had this reaction infrequently	Had this reaction sometimes	Had this reaction frequently	This reaction would not go away
0	1	2	3	4

More Recently (Circle One)

Does not describe my reactions	Had this reaction infrequently	Had this reaction sometimes	Had this reaction frequently	This reaction would not go away
0	1	2	3	4

Did others notice a change in you? (Circle/Select one) □ Yes □ No

43. As a consequence of the memorable encounter I had with racism, I feel worried a lot (for example, walking down the street).

Right After Event (Circle One)

Does not describe my reactions	Had this reaction infrequently	Had this reaction sometimes	Had this reaction frequently	This reaction would not go away
0	1	2	3	4

More Recently (Circle One)

Does not describe my reactions	Had this reaction infrequently	Had this reaction sometimes	Had this reaction frequently	This reaction would not go away
0	1	2	3	4

Did others notice a change in you? (Circle/Select one) □ Yes □ No

44. As a consequence of the memorable encounter I had with racism, there are times when I feel and think as if the event is happening again.

Right After Event (Circle One)

Does not describe my reactions	Had this reaction infrequently	Had this reaction sometimes	Had this reaction frequently	This reaction would not go away
0	1	2	3	4

More Recently (Circle One)

Does not describe my reactions	Had this reaction infrequently	Had this reaction sometimes	Had this reaction frequently	This reaction would not go away
0	1	2	3	4

Did others notice a change in you? (Circle/Select one) □ Yes □ No

45. As a consequence of the memorable encounter I had with racism, I feel nervous (for example, when others approach you).

Right After Event (Circle One)

Does not describe my reactions	Had this reaction infrequently	Had this reaction sometimes	Had this reaction frequently	This reaction would not go away
0	1	2	3	4

More Recently (Circle One)

Does not describe my reactions	Had this reaction infrequently	Had this reaction sometimes	Had this reaction frequently	This reaction would not go away
0	1	2	3	4

Did others notice a change in you? (Circle/Select one) □ Yes □ No

46. As a consequence of the memorable encounter I had with racism, I tend to stay away from people/places who remind me of the event.

Right After Event (Circle One)

Does not describe my reactions	Had this reaction infrequently	Had this reaction sometimes	Had this reaction frequently	This reaction would not go away
0	1	2	3	4

More Recently (Circle One)

Does not describe my reactions	Had this reaction infrequently	Had this reaction sometimes	Had this reaction frequently	This reaction would not go away
0	1	2	3	4

Did others notice a change in you? (Circle/Select one) □ Yes □ No

47. As a consequence of my most memorable encounter with racism, I am inclined to feel that I am a failure.

Right After Event (Circle One)

Does not describe my reactions	Had this reaction infrequently	Had this reaction sometimes	Had this reaction frequently	This reaction would not go away
0	1	2	3	4

More Recently (Circle One)

Does not describe my reactions	Had this reaction infrequently	Had this reaction sometimes	Had this reaction frequently	This reaction would not go away
0	1	2	3	4

Did others notice a change in you? (Circle/Select one) □ Yes □ No

48. As a consequence of the memorable encounter I had with racism, I feel I can seldom do anything right.

Right After Event (Circle One)

Does not describe my reactions	Had this reaction infrequently	Had this reaction sometimes	Had this reaction frequently	This reaction would not go away
0	1	2	3	4

More Recently (Circle One)

Does not describe my reactions	Had this reaction infrequently	Had this reaction sometimes	Had this reaction frequently	This reaction would not go away
0	1	2	3	4

Did others notice a change in you? (Circle/Select one) □ Yes □ No

49. As a consequence of the memorable encounter I had with racism, I try not to think about, talk about, or have feelings about the event.

Right After Event (Circle One)

Does not describe my reactions	Had this reaction infrequently	Had this reaction sometimes	Had this reaction frequently	This reaction would not go away
0	1	2	3	4

More Recently (Circle One)

Does not describe my reactions	Had this reaction infrequently	Had this reaction sometimes	Had this reaction frequently	This reaction would not go away
0	1	2	3	4

Did others notice a change in you? (Circle/Select one) □ Yes □ No

50. As a consequence of the memorable encounter I had with racism, I become easily frightened (for example, when you hear subtle noises).

Right After Event (Circle One)

Does not describe my reactions	Had this reaction infrequently	Had this reaction sometimes	Had this reaction frequently	This reaction would not go away
0	1	2	3	4

More Recently (Circle One)

Does not describe my reactions	Had this reaction infrequently	Had this reaction sometimes	Had this reaction frequently	This reaction would not go away
0	1	2	3	4

Did others notice a change in you? (Circle/Select one) □ Yes □ No

51. As a consequence of the memorable encounter I had with racism, I can't seem to get the event out of my mind even when I try.

Right After Event (Circle One)

Does not describe my reactions	Had this reaction infrequently	Had this reaction sometimes	Had this reaction frequently	This reaction would not go away
0	1	2	3	4

More Recently (Circle One)

Does not describe my reactions	Had this reaction infrequently	Had this reaction sometimes	Had this reaction frequently	This reaction would not go away
0	1	2	3	4

Did others notice a change in you? (Circle/Select one) □ Yes □ No

52. As a consequence of the memorable encounter I had with racism, I experience feelings of hopelessness.

Right After Event (Circle One)

Does not describe my reactions	Had this reaction infrequently	Had this reaction sometimes	Had this reaction frequently	This reaction would not go away
0	1	2	3	4

More Recently (Circle One)

Does not describe my reactions	Had this reaction infrequently	Had this reaction sometimes	Had this reaction frequently	This reaction would not go away
0	1	2	3	4

Did others notice a change in you? (Circle/Select one) □ Yes □ No

In this country, people come from many different countries and cultures, and there are many different words to describe the different backgrounds or ethnic groups that people come from. Some examples of the names of ethnic groups are Hispanic or Latino, Black or African American, Asian American, Chinese, Filipino, American Indian, Mexican American, Caucasian or White, Italian American, and many others. These questions are about your ethnicity or your ethnic group and how you feel about it or react to it.

Please fill in: In terms of ethnic group, I consider myself to be _____

Indicate your response by filling in the correct circle. Use the numbers below to indicate how much you agree or disagree with each statement.

	Strongly Agree (4)	Agree (3)	Disagree (2)	Strongly Disagree (1)
1. I have spent time trying to find out more about my ethnic group, such as history, traditions, and customs.	□	□	□	□
2. I am active in organizations or social groups that include mostly members of my own ethnic group.	□	□	□	□
3. I have a clear sense of my ethnic background and what it means for me.	□	□	□	□
4. I think a lot about how my life will be affected by my ethnic group membership.	□	□	□	□
5. I am happy that I am a member of the group I belong to.	□	□	□	□
6. I have a strong sense of belonging to my own ethnic group.	□	□	□	□
7. I understand pretty well what my ethnic group membership means to me.	□	□	□	□
8. In order to learn more about my ethnic background, I have often talked to other people about my ethnic group.	□	□	□	□
9. I have a lot of pride in my ethnic group.	□	□	□	□
10. I participate in cultural practices of my own group, such as special food, music, or customs.	□	□	□	□
11. I feel a strong attachment towards my own ethnic group.	□	□	□	□
12. I feel good about my cultural or ethnic background.	□	□	□	□

DIRECTIONS: Indicate the degree to which you agree or disagree with each statement below by using the following scale:

5 = Strongly Agree
4 = Mildly Agree
3 = Agree and Disagree Equally
2 = Mildly Disagree
1 = Strongly Disagree

_____ 1. People close to me probably think I hold a grudge too long.
_____ 2. I can forgive a friend for almost anything.
_____ 3. If someone treats me badly, I treat him or her the same.
_____ 4. I try to forgive others even when they don't feel guilty for what they did.
_____ 5. I can usually forgive and forget an insult.
_____ 6. I feel bitter about many of my relationships.
_____ 7. Even after I forgive someone, things often come back to me that I resent.
_____ 8. There are some things for which I could never forgive even a loved one.
_____ 9. I have always forgiven those who have hurt me.
_____ 10. I am a forgiving person.